

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 000003		3. EFFECTIVE DATE 08/22/2014		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY NASA/John F. Kennedy Space Center Office of Procurement Mail Code OP-OS Kennedy Space Center FL 32899		CODE KSC		7. ADMINISTERED BY (If other than Item 6) NASA/Kennedy Space Center Office of Procurement Mail Code OP-OS Kennedy Space Center FL 32899		CODE KSC	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x) 9A. AMENDMENT OF SOLICITATION NO. NNK14514021R			
				x 9B. DATED (SEE ITEM 11) 08/08/2014			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				10B. DATED (SEE ITEM 13)			
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input checked="" type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
	D. OTHER (Specify type of modification and authority)						
E. IMPORTANT: Contractor <input type="checkbox"/> is not. <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
The purpose of this amendment is to:							
1. Extend the due date for proposals. The due date is hereby changed to September 2, 2014 at 12 PM ET.							
2. Incorporate changes to RFP resulting from questions received from potential Offerors.							
3. Provide responses to questions received on or before August 20th.							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Steven B. Peterson			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				(Signature of Contracting Officer)			

Table of Contents

SECTION 1. CONTINUATION OF SF 1449	6
1.1. CONTRACT TYPE	6
1.2. SUPPLIES TO BE FURNISHED	6
1.3. PERFORMANCE SPECIFICATION	6
1.4. DELIVERY LOCATIONS (Alphabetical)	6
1.5. PERIOD OF PERFORMANCE	7
1.6. SCHEDULE OF SUPPLIES	8
1.6.1. BULK AND DEWAR HELIUM REQUIREMENTS	8
1.6.2. CYLINDER HELIUM REQUIREMENTS.....	9
1.7. CONTRACT PRICING	10
1.7.1. PRODUCT UNIT PRICING	10
1.7.2. DELIVERY CHARGE.....	11
1.8. PRICE ADJUSTMENT FOR VARIANCES IN GOVERNMENT-CONTROLLED CRUDE HELIUM PRICES....	12
1.9. PRICE ADJUSTMENT FOR VARIANCES IN RETAILED ON-HIGHWAY DIESEL FUEL PRICES	14
1.10. DELIVERY ORDER PROCEDURES	15
SECTION 2. ADDENDUM TO FAR 52.212-4, CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS	17
2.1. 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER. (MAY 2011)	17
2.2. 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL. (JAN 2011)	17
2.3. 52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS. (JUL 2013)	17
2.4. Reserved.....	17
2.5. FAR 52.211-16 VARIATION IN QUANTITY (APR 1984).....	17
2.6. 52.212-4 CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS. (SEP 2013)	17
2.7. FAR 52.216-18 ORDERING (OCT 1995).....	17
2.8. FAR 52.216-19 ORDER LIMITATIONS (OCT 1995)	17
2.9. FAR 52.216-21 REQUIREMENTS (OCT 1995).....	18
2.10. FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000).....	19
2.11. FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) - ALTERNATE I (JULY 1995).....	19
2.12. FAR 52.232-18 AVAILABILITY OF FUNDS (APR 1984)	19
2.13. FAR 52.245-1 GOVERNMENT PROPERTY (JUNE 2007) - ALT I (JUNE 2007)	19
2.14. FAR 52.247-34 F.O.B. DESTINATION (NOV 1991)	19
2.15. FAR 52.247-66 RETURNABLE CYLINDERS (MAY 1994)	19

2.16. FAR 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE. (FEB 1998).....	20
2.17. NFS 1852.215-84 OMBUDSMAN. (NOV 2011).....	21
2.18. NFS 1852.219-76 NASA 8 PERCENT GOAL (JULY 1997).....	21
2.19. NFS 1852.223-70 SAFETY AND HEALTH (APR 2002)	22
2.20. NFS 1852.223-75 MAJOR BREACH OF SAFETY OR SECURITY (FEB 2002) - ALTERNATE I (FEB 2006)	24
2.21. NFS 1852.242-70 TECHNICAL DIRECTION (SEP 1993).....	24
2.22. NFS 1852.245-76 LIST OF GOVERNMENT-FURNISHED PROPERTY (OCT 1988)	25
SECTION 3. SPECIAL CONTRACT REQUIREMENTS.....	26
3.1. DELIVERY REQUIREMENTS.....	26
3.2. MATERIAL INSPECTION AND RECEIVING	26
3.3. METHOD OF MEASUREMENT FOR BILLING	27
3.4. RESIDUAL CREDIT	28
3.5. DEMURRAGE	30
3.6. PRODUCT INTEGRITY CONTROL.....	30
3.7. QUALITY ASSURANCE, INSPECTION AND ACCEPTANCE.....	30
3.8. GOVERNMENT'S INABILITY TO ACCEPT DELIVERY	31
3.9. FAILURE TO DELIVER	31
3.10. UNFORECASTED REQUIREMENTS.....	32
3.11. FLASH REPORTS.....	32
3.12. COMPLIANCE WITH HELIUM STEWARDSHIP ACT OF 2013.....	32
3.13. HELIUM USAGE AT OTHER LOCATIONS	33
3.14. MEMORANDUMS OF UNDERSTANDING (MOU) BETWEEN NASA LOCATIONS AND BLM.....	33
SECTION 4. FAR 52.212-5 ATTACHMENT	34
4.1. FAR 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS - COMMERCIAL ITEMS. (JAN 2014)	34
SECTION 5. CONTRACT DOCUMENTS, EXHIBITS OR ATTACHMENTS.....	41
5.1. LIST OF ATTACHMENTS.....	41
SECTION 6. ADDENDUM TO 52.212-1, INSTRUCTIONS TO OFFERORS - COMMERCIAL ITEMS	42
6.1. FAR 52.212-1 INSTRUCTIONS TO OFFERORS - COMMERCIAL ITEMS (JUL 2013).....	42
6.2. FAR 52.204-7 SYSTEM FOR AWARD MANAGEMENT. (JUL 2013)	42
6.3. FAR 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998).....	42
6.4. COMMUNICATIONS REGARDING THIS SOLICITATION	42
6.5. DUE DATE FOR RECEIPT OF PROPOSALS.....	42
6.6. DELIVERY INSTRUCTIONS FOR PROPOSALS	42

SECTION 7. PROPOSAL CONTENT.....	43
7.1. TECHNICAL ACCEPTABILITY	43
7.2. PRICING	43
7.3. NFS 1852.223-73 SAFETY AND HEALTH PLAN (NOV 2004)	44
7.4. NFS 1852.245-79 USE OF GOVERNMENT-OWNED PROPERTY (JULY 1997).....	45
7.5. FAR 52.232-38 SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER (MAY 1999)	46
SECTION 8. EVALUATION	47
8.1. PROPOSAL EVALUATION	47
8.2. GROUPED CLINS	49
8.3. OTHER	49
SECTION 9. REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS	50
9.1. FAR 52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS-COMMERCIAL ITEMS. (NOV 2013) - ALTERNATE I (APR 2011).....	50

SECTION 1. CONTINUATION OF SF 1449

1.1. CONTRACT TYPE

This is a fixed-price, requirements contract with delivery fee, for the purchase of liquid and gaseous helium. The delivery location and estimated quantities are specified in the schedule as Contract Line Item Numbers (CLIN).

(End of text)

1.2. SUPPLIES TO BE FURNISHED

The Contractor shall provide all resources (except as may be expressly stated in the contract as furnished by the Government) necessary to deliver the items identified in the Schedule in accordance with the Statement of Work (refer to Attachment 03).

(End of clause)

1.3. PERFORMANCE SPECIFICATION

Product supplied under this contract shall fully meet the requirements of the following performance specification unless otherwise specified in the Schedule as high or ultra high purity, or referencing Compressed Gas Association specification CGA G-9.1-2009:

Performance Specification Document ID: MIL-PRF-27407C

Title: Propellant Pressurizing Agent, Helium

Document Part Description: Revision C

Part Date: 29-NOV-2006

Specification may be downloaded from: <http://www.assistdocs.com/search/search_basic.cfm>

Note: The test method for neon identified in Table I of MIL-PRF-27407C may be accomplished by using the assurance method identified at Section 4.5a. of MIL-PRF-27407C, provided the contractor adheres to the following conditions: (1) Gaseous helium (Grade A and/or Grade B) is produced by vaporization of liquid helium. (2) Analysis of the liquid helium indicates that total neon impurities is less than 2 parts per million. (3) Liquid helium analysis shall accompany shipments of gaseous helium as part of the Laboratory Analysis Report (see Section 3.2). Contractor shall attach the liquid helium analysis results to the Laboratory Analysis Report. Neon analysis/analytical results shall be clearly identified on the liquid helium analysis. (4) There is no source of neon during the vaporization, compression and filling operations that convert the liquid helium to the final delivered pressurized gaseous helium. (5) Certificate of conformance (see Section 3.2) shall certify the gaseous helium supplied meets or exceeds the appropriate grade purity specified in MIL-PRF-27407C.

(End of clause)

1.4. DELIVERY LOCATIONS (Alphabetical)

Ames Research Center (ARC), Moffett Field, CA

Armstrong Flight Research Center (AFRC), Palmdale, CA

Columbia Scientific Balloon Facility (CSBF), Ft. Sumner, NM

Columbia Scientific Balloon Facility (CSBF), Palestine, TX

Columbia Scientific Balloon Facility (CSBF), Port Hueneme, CA

Glenn Research Center at Lewis Field (GRC-LF), Cleveland, OH
Glenn Research Center Plumbrook Station (GRC-PS), Sandusky, OH
Goddard Space Flight Center (GSFC), Greenbelt, MD
Jet Propulsion Laboratory (JPL), Pasadena, CA
Johnson Space Center (JSC), Houston, TX
Kennedy Space Center (KSC), KSC, FL
Langley Research Center (LaRC), Hampton, VA
Marshall Space Flight Center (MSFC), MSFC, AL
Michoud Assembly Facility (MAF), New Orleans, LA
Stennis Space Center (SSC), SSC, MS
Wallops Flight Facility (WFF), Wallops Island, VA
White Sands Test Facility (WSTF), Las Cruces, NM
(End of text)

1.5. PERIOD OF PERFORMANCE

- (a) The basic contract period of performance is from October 1, 2014, through September 30, 2016.
There are two option periods available, which if exercised, will extend the period of performance as provide below (Reference: FAR 52.217-9 Option to Extend the Term of the Contract).
Option 1: October 1, 2016, through September 30, 2018
Option 2: October 1, 2018, through September 30, 2019
- (b) Period of performance by contract year
Contract Year 1: October 1, 2014, through September 30, 2015
Contract Year 2: October 1, 2015, through September 30, 2016
Contract Year 3: October 1, 2016, through September 30, 2017
Contract Year 4: October 1, 2017, through September 30, 2018
Contract Year 5: October 1, 2018, through September 30, 2019
(End of clause)

1.6. SCHEDULE OF SUPPLIES

Schedule of supplies are provided on the following pages. Note: The best estimated quantity reflects the estimated total yearly usage at a location.

1.6.1. BULK AND DEWAR HELIUM REQUIREMENTS

CLIN	LOCAL ¹	CONTAINER	UNIT ²	BEST ESTIMATED QUANTITY ³					SPEC. GRADE ⁴
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
001	ARC	Dewar (100 Liter)	Liter	1,800	1,800	1,800	1,800	1,800	
002	CSBF CA	ISO	Scf	800,000	1,120,000	1,120,000	1,120,000	1,120,000	Grade A
003	CSBF CA	Dewar (500 liter)	Liter	30,000	30,000	30,000	30,000	30,000	
004	CSBF TX	Trailer	Scf	1,550,000	1,550,000	1,550,000	1,550,000	1,550,000	Grade A
005	CSBF TX	Dewar (500 Liter)	Liter	10,500	10,500	10,500	10,500	10,500	
006	CSBF NM	Trailer	Scf	4,390,000	4,390,000	4,390,000	4,390,000	4,390,000	Grade A
007	CSBF NM	Dewar (500 Liter)	Liter	13,000	13,000	13,000	13,000	13,000	
008	GRC LF	Trailer (2400 Psig)	Scf	40,000	40,000	60,000	60,000	60,000	Grade A
009	GRC LF	Trailer (2400 Psig)	Scf	65,000	36,000	36,000	36,000	36,000	Grade N ⁵
010	GRC PS	Trailer (2400 Psig)	Scf	825,000	600,000	600,000	600,000	600,000	Grade A
011	GSFC	Dewar (60 Liter)	Liter	1,020	1,020	1,020	1,020	1,020	
012	GSFC	Dewar (100 Liter)	Liter	15,000	15,000	15,000	15,000	15,000	
013	GSFC	Dewar (250 Liter)	Liter	3,500	3,500	3,500	3,500	3,500	
014	GSFC	Dewar (350 Liter)	Liter	4,550	4,550	4,550	4,550	4,550	
015	GSFC	Dewar (500 Liter)	Liter	10,000	10,000	10,000	10,000	10,000	
016	JSC	Trailer	Scf	150,000	150,000	150,000	150,000	150,000	Grade A
017	JSC	Dewar	Liter	2000	2000	2000	2000	2000	
018	JPL	Trailer	Scf				40,000		Grade A ¹⁰
019	JPL	Dewar	Liter	20,000	20,000	20,000	20,000	20,000	
020	KSC	Tanker	Liter	2,200,000	1,720,000	2,080,000	1,760,000	1,840,000	
021	KSC	Dewar	Liter	1,600	1,600	1,600	1,600	1,600	
022	LaRC	Dewar	Liter	1,400	1,400	1,400	1,400	1,400	
023	MSFC	Trailer	Scf	6,000,000	7,000,000	7,000,000	7,000,000	7,000,000	Grade A
024	MSFC	Dewar	Liter	4,500	4,500	4,500	4,500	4,500	
025	MAF	Trailer	Scf	300,000	1,000,000	200,000	300,000	1,000,000	Grade A
026	MAF	Dewar (500 Liter)	Liter	1,500	2,000	2,500	2,500	3,000	
027	SSC	Trailer (2200 Psig)	Scf	10,200,000	10,400,000	10,800,000	5,800,000	11,300,000	Grade A
028	WSTF	Trailer	Scf	520,000	520,000	520,000	520,000	520,000	Grade A
029	AFRC	Dewar	Liter	31,000	31,000	31,000	31,000	31,000	

¹Delivery location

²Gaseous helium (Type I) is listed in standard cubic feet (scf). Additionally, liquid helium (Type II) is listed in liters.

³The best estimated quantity reflects the estimated total yearly usage at a location.

⁴Performance specification grade (per MIL-PRF 27407C unless otherwise noted)

⁵Per CGA-G-9.1-2009

¹⁰ Location uncertain of actual year of single trailer delivery expected during the Period of Performance of the contract. Actual delivery may occur during any year of the Period of Performance of the contract.

(End of text)

1.6.2. CYLINDER HELIUM REQUIREMENTS

CLIN	LOCAL ¹	CONTAINER	UNIT ²	BEST ESTIMATED QUANTITY ³					SPEC. GRADE ⁴
				YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
030	ARC	Cylinder	Scf	14,700	14,400	11,800	11,800	11,800	Grade L ^{5,9}
031	GSFC	Cylinder (212 Scf)	Scf	105,000	105,000	105,000	105,000	105,000	Grade B
032	GSFC	Cylinder (213 Scf)	Scf	7,500	7,500	7,500	7,500	7,500	⁶
033	GSFC	Cylinder (300 Scf)	Scf	10,800	10,800	10,800	10,800	10,800	⁶
034	GSFC	Cylinder (292 Scf)	Scf	4,400	4,400	4,400	4,400	4,400	⁷
035	WFF	Cylinder (213 Scf)	Scf	3,410	3,410	3,410	3,410	3,410	Grade B
036	JSC	Cylinder (257 Scf)	Scf	6,000	6,000	6,000	6,000	6,000	Grade A
037	JSC	Cylinder (213 Scf)	Scf	58,000	58,000	58,000	58,000	58,000	⁸
038	LaRC	Cylinder (220 Scf)	Scf	7,000	7,000	7,000	7,000	7,000	Grade A

¹Delivery location

²Gaseous helium (Type I) is listed in standard cubic feet (scf). Additionally, liquid helium (Type II) is listed in liters.

³The best estimated quantity reflects the estimated total yearly usage at a location.

⁴Performance specification grade (per MIL-PRF 27407C unless otherwise noted)

⁵Per CGA-G-9.1-2009

⁶99.999% Purity (High Purity)

⁷99.9995% Purity (Ultra High Purity)

⁸99.9997% Purity (Ultra High Purity)

⁹Max water allowable requirement of 5 ppm (vs 15 ppm specified in Grade L).

(End of text)

1.7. CONTRACT PRICING

1.7.1. PRODUCT UNIT PRICING

CLIN	Location	Unit	Type	Product Unit Prices				
				Year 1	Year 2	Year 3	Year 4	Year 5
001	ARC, Moffett Field, CA	Liter	Dewar					
002	CSBF, Port Hueneme, CA	Scf	ISO					
003	CSBF, Port Hueneme, CA	Liter	Dewar					
004	CSBF, Palestine, TX	Scf	Trailer					
005	CSBF, Palestine, TX	Liter	Dewar					
006	CSBF, Ft. Sumner, NM	Scf	Trailer					
007	CSBF, Ft. Sumner, NM	Liter	Dewar					
008	GRC-LF, Cleveland, OH	Scf	Trailer					
009	GRC-LF, Cleveland, OH	Scf	Trailer					
010	GRC-PS, Sandusky, OH	Scf	Trailer					
011	GSFC, Greenbelt, MD	Liter	Dewar					
012	GSFC, Greenbelt, MD	Liter	Dewar					
013	GSFC, Greenbelt, MD	Liter	Dewar					
014	GSFC, Greenbelt, MD	Liter	Dewar					
015	GSFC, Greenbelt, MD	Liter	Dewar					
016	JSC, Houston, TX	Scf	Trailer					
017	JSC, Houston, TX	Liter	Dewar					
018	JPL, Pasadena, CA	Scf	Trailer					
019	JPL, Pasadena, CA	Liter	Dewar					
020	KSC, FL	Liter	Tanker					
021	KSC, FL	Liter	Dewar					
022	LaRC, Hampton, VA	Liter	Dewar					
023	MSFC, AL	Scf	Trailer					
024	MSFC, AL	Liter	Dewar					
025	MAF, New Orleans, LA	Scf	Trailer					
026	MAF, New Orleans, LA	Liter	Dewar					
027	SSC, MS	Scf	Trailer					
028	WSTF, Las Cruces, NM	Scf	Trailer					
029	AFRC, Palmdale CA	Liter	Dewar					
030	ARC, Moffett Field, CA	Scf	Cylinder					
031	GSFC, Greenbelt, MD	Scf	Cylinder					
032	GSFC, Greenbelt, MD	Scf	Cylinder					
033	GSFC, Greenbelt, MD	Scf	Cylinder					
034	GSFC, Greenbelt, MD	Scf	Cylinder					
035	WFF, Wallops Island, VA	Scf	Cylinder					

036	JSC, Houston, TX	Scf	Cylinder					
037	JSC, Houston, TX	Scf	Cylinder					
038	LaRC, Hampton, VA	Scf	Cylinder					

(End of clause)

1.7.2. DELIVERY CHARGE

Note: Refer to **Section 1.9. Price Adjustment for Variances in Retailed On-Highway Diesel Fuel Prices**, for applicable diesel fuel threshold. Fee is charged per delivery.

Location	Mode	Delivery Fee by Diesel Fuel ¹ Thresholds										
		\$0.00- \$2.25	\$2.26- \$2.75	\$2.76- \$3.25	\$3.26- \$3.75	\$3.76- \$4.25	\$4.26- \$4.75	\$4.76- \$5.25	\$5.26- \$5.75	\$5.76- \$6.25	\$6.26- \$6.75	\$6.76- \$7.25
CSBF, Port Hueneme, CA	Tanker/Trailer											
CSBF, Palestine, TX	Tanker/Trailer											
CSBF, Ft. Sumner, NM	Tanker/Trailer											
GRC-LF, Cleveland, OH	Tanker/Trailer											
GRC-PS, Sandusky, OH	Tanker/Trailer											
JSC, Houston, TX	Tanker/Trailer											
JPL, Pasadena, CA	Tanker/Trailer											
KSC, FL	Tanker/Trailer											
MSFC, AL	Tanker/Trailer											
MAF, New Orleans, LA	Tanker/Trailer											
SSC, MS	Tanker/Trailer											
WSTF, Las Cruces, NM	Tanker/Trailer											
Location	Mode	\$0.00- \$2.25	\$2.26- \$2.75	\$2.76- \$3.25	\$3.26- \$3.75	\$3.76- \$4.25	\$4.26- \$4.75	\$4.76- \$5.25	\$5.26- \$5.75	\$5.76- \$6.25	\$6.26- \$6.75	\$6.76- \$7.25
ARC, Moffett Field, CA	Dewar/Cylinder											
CSBF, Port Hueneme, CA	Dewar/Cylinder											
CSBF, Palestine, TX	Dewar/Cylinder											
CSBF, Ft. Sumner, NM	Dewar/Cylinder											
GSFC, Greenbelt, MD	Dewar/Cylinder											
JSC, Houston, TX	Dewar/Cylinder											
JPL, Pasadena, CA	Dewar/Cylinder											
KSC, FL	Dewar/Cylinder											
LaRC, Hampton, VA	Dewar/Cylinder											
MSFC, AL	Dewar/Cylinder											
MAF, New Orleans, LA	Dewar/Cylinder											
WFF, Wallops Island, VA	Dewar/Cylinder											
AFRC, Palmdale, CA	Dewar/Cylinder											

¹ Retail On-Highway Diesel Fuel Price (U.S. Average) as published by the Energy Information Administration, Official Energy Statistics from the U.S. Government < <http://www.eia.doe.gov/> >

(End of clause)

1.8. PRICE ADJUSTMENT FOR VARIANCES IN GOVERNMENT-CONTROLLED CRUDE HELIUM PRICES

- (a) Purpose: Government suppliers of helium are required to obtain crude helium from the Bureau of Land Management (BLM). Prices charged for crude helium are set annually by the Secretary of the Department of Interior (hereinafter referred to as “Secretary”) in the spring prior to each Government Fiscal Year (October 1 through September 30). Estimated future-year crude helium prices are provided in this solicitation for offerors to consider in developing pricing. Since the actual crude helium future-year prices will be set by the Secretary and may vary significantly from estimates, this provision is established to provide for adjustment of contract product prices in the event the actual future-year prices set by the Secretary vary from the estimates by 2 percent or more.
- (b) Baseline and Adjustment Thresholds: The table below presents the estimated and actual crude helium prices (in thousand standard cubic feet) and the adjustment thresholds for determining whether contract prices will be adjusted.

Gov’t Fiscal Year	Contract Year	Estimated Crude Helium Price	Downward Adjustment Threshold	Actual Crude Helium Price	Upward Adjustment Threshold
2015	Year 1	N/A	N/A	\$76.00	N/A
2016	Year 2	\$79.75	\$78.16	TBD	\$81.35
2017	Year 3	\$83.75	\$82.08	TBD	\$85.43
2018	Year 4	\$88.00	\$86.24	TBD	\$89.76
2019	Year 5	\$92.50	\$90.65	TBD	\$94.35

- (c) Computation of Contract Price Adjustments: Each year after the Secretary sets the price for crude helium for the next Government Fiscal Year, the contracting officer will enter the actual price set by the Secretary in the table in paragraph (b), compare it to the adjustment thresholds, and determine if the actual price (rounded to two decimal places) is equal to either of the thresholds, less than the downward adjustment threshold or greater than the upward adjustment threshold. If so, the Contracting officer will compute adjusted contract prices, notify the contractor, and amend the contract accordingly. Product price adjustments will be computed using the following formulas.
- (1) Step 1: Computation of adjustment factor for one standard cubic foot (scf)

$$AF = (A - E)/1,000$$

Where,

AF = Adjustment factor

A = Actual value from table in paragraph (b) of this clause

E = Estimate value from table in paragraph (b) of this clause

- (2) Step 2A: Computation of adjusted contract product prices where the contract product item price is based upon the scf unit of sale:

$$ACPP = CPP + AF$$

Where,

ACPP = Adjusted contract product price

CCP = Contract product unit price from Section 1.7.1

AF = Adjustment factor from Step 1

- (3) Step 2B: Computation of adjusted contract product prices where the contract product item price is based upon a liter unit of sale:

$$ACPP = CPP + (AF \times 26.63)$$

Where,

ACPP = Adjusted contract product price

CCP = Contract product price from Section 1.7.1

AF = Adjustment factor from Step 1

(End of clause)

1.9. PRICE ADJUSTMENT FOR VARIANCES IN RETAILED ON-HIGHWAY DIESEL FUEL PRICES

- (a) The delivery fees shown in the Section 1.7.2. Delivery Charge, shall be subject to quarterly price adjustment based on the changes in the Retail On-Highway Diesel Fuel Price (U.S. Average) as published by the Energy Information Administration, Official Energy Statistics from the U.S. Government < <http://www.eia.doe.gov/>>.
- (b) Computation of Contract Price Adjustments: Not later than the first week of each quarter, the contracting officer will enter the actual Retail On-Highway Diesel Fuel Price (U.S. Average) in the table below, and compare it to the fuel thresholds identified in Section 1.7.2. Delivery Charge. If the price falls outside the threshold, the contracting officer will update the table below, notify the contractor, and amend the contract accordingly.

Quarterly Periods	Retail On-Highway Diesel Fuel Price		Delivery Fee Threshold		Mod
	Date	Price	Existing	Revised ¹	
10/01/2014 – 12/31/2014	09/22/2014	TBD	N/A	TBD	BASIC
01/01/2015 – 03/31/2015	12/22/2014	TBD	TBD	TBD	TBD
04/01/2015 – 06/30/2015	03/23/2015	TBD	TBD	TBD	TBD
07/01/2015 – 09/30/2015	06/22/2015	TBD	TBD	TBD	TBD
10/01/2015 – 12/31/2015	09/21/2015	TBD	TBD	TBD	TBD
01/01/2016 – 03/31/2016	12/21/2015	TBD	TBD	TBD	TBD
04/01/2016 – 06/30/2016	03/21/2016	TBD	TBD	TBD	TBD
07/01/2016 – 09/30/2016	06/20/2016	TBD	TBD	TBD	TBD
10/01/2016 – 12/31/2016	09/19/2016	TBD	TBD	TBD	TBD
01/01/2017 – 03/31/2017	12/19/2016	TBD	TBD	TBD	TBD
04/01/2017 – 06/30/2017	03/20/2017	TBD	TBD	TBD	TBD
07/01/2017 – 09/30/2017	06/19/2017	TBD	TBD	TBD	TBD
10/01/2017 – 12/31/2017	09/18/2017	TBD	TBD	TBD	TBD
01/01/2018 – 03/31/2018	12/25/2017	TBD	TBD	TBD	TBD
04/01/2018 – 06/30/2018	03/19/2018	TBD	TBD	TBD	TBD
07/01/2018 – 09/30/2018	06/18/2018	TBD	TBD	TBD	TBD
10/01/2018 – 12/31/2018	09/24/2018	TBD	TBD	TBD	TBD
01/01/2019 – 03/31/2019	12/24/2018	TBD	TBD	TBD	TBD
04/01/2019 – 06/30/2019	03/25/2019	TBD	TBD	TBD	TBD
07/01/2019 – 09/30/2019	06/24/2019	TBD	TBD	TBD	TBD

¹ If necessary.

(End of clause)

1.10. DELIVERY ORDER PROCEDURES

- (a) A contracting officer will issue written delivery orders prior to the first day of the month, quarter, or other mutually acceptable period of time not-to-exceed one year. The delivery order will be issued in writing on a Standard Form 1449 and will include:
 - (1) Estimated quantity of product to be delivered during the effective period of the order. Note: The contractor shall not deliver more than this quantity without the prior approval of the contracting officer.
 - (2) Delivery order number, contract number, and applicable CLIN(s).
 - (3) Period in which deliveries shall be made pursuant to such orders.
 - (4) Receiving destinations.
 - (5) Necessary shipping instructions, including "Mark For" data.
 - (6) The cumulative delivery order value and the total funds available.
- (b) Amendments to orders will be issued in writing on a Standard Form 30, or equivalent, in the same manner as original orders. In emergencies or special situations, the contracting officer may issue orders orally. However, the contracting officer will promptly execute a written delivery order to confirm all oral orders. The contracting officer will send one copy of all delivery orders and modifications to the following address: NASA/KSC, Mail Code: TA-A5B/Attn: Tom Elam, Kennedy Space Center, FL 32899 or <thomas.m.elam@nasa.gov>.
- (c) A request for shipment for propellant supplies against the written delivery order and delivery schedules for each of the delivery locations will be made by the Requirements Point of Contact (RPC). All such requests for shipment from the RPCs are subject to the terms and conditions of this contract. When a delivery location makes a request for shipment against a delivery order issued as specified in paragraph (a) of this clause, the contractor agrees to proceed to effect such shipment as promptly as is necessary to ensure that the specified product can be delivered to the destination by the time and/or date required. The normal receiving hours for the delivery locations are specified in the Statement of Work (refer to Attachment 03). However, when required by any order placed under this contract, the contractor agrees to deliver product seven days a week, 24 hours a day, including all holidays. Note: Unless otherwise specified in the Statement of Work, Attachment 3, a verbal request for shipment against the written delivery order will be placed by the RPC via telephone with a minimum of 48 hours notice during standard work days (i.e., Monday through Friday).
- (d) The contractor shall bill the receiving destination as specified on the delivery order. Any unauthorized over-shipment of the total quantity on the delivery order will be solely at the contractor's risk and the Government shall not be obligated to pay for such unauthorized over-shippments. In the event of a conflict, the contractor shall try to resolve all issues with the contracting officer issuing the delivery order. If the parties are unable to reach a mutually acceptable solution, the contracting officer for this contract will evaluate the issues presented by the parties and render a final decision.
- (e) Invoices for payment shall be submitted after each calendar month of performance, or portion thereof, if applicable. The contractor shall ensure that all billings comply with this contract. In addition to the invoice requirements provided at FAR 52.212-4(g)(iii), each item billed shall appear as a separate line on the invoice, and shall include the delivery order number, contract number, and applicable CLIN. Delivery fee lines shall provide the date of delivery, which shall correspond with product acceptance dates. Charges for temporary ancillary equipment and/or services shall be

invoiced separately from cryogenic propellant deliveries. The invoice together with a fully executed Material Inspection and Receiving Report, with applicable weight ticket, shall be submitted to the appropriate office as designated on the delivery order. The contractor agrees to provide any additional information requested by the contracting officer or his appointed representative to substantiate billings.

- (f) Funding will be provided by delivery locations through the issuance of delivery orders. The contractor shall not deliver product unless adequate funding has been obligated by a contracting officer at the applicable delivery location.

(End of clause)

SECTION 2. ADDENDUM TO FAR 52.212-4, CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS

2.1. 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER. (MAY 2011)

2.2. 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL. (JAN 2011)

2.3. 52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS. (JUL 2013)

2.4. Reserved.

2.5. FAR 52.211-16 VARIATION IN QUANTITY (APR 1984)

(a) A variation in the quantity of any item called for by this contract will not be accepted unless the variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified in paragraph (b) of this clause.

(b) The permissible variation shall be limited to:

10 Percent increase

10 Percent decrease

This increase or decrease shall apply to each item quantity specified in delivery orders.

(End of Clause)

2.6. 52.212-4 CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS. (SEP 2013)

2.7. FAR 52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued during the performance period specified in Section 1.5.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered issued when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

2.8. FAR 52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in a quantity less than 30 liters, the Government is not obligated to purchase, nor is the Contractor

obligated to furnish, those supplies or services under the contract. Note: The Government will, to the maximum extent practicable, order helium in standard container increments.

- (b) Maximum order. The Contractor is not obligated to honor -
 - (1) Any order for a single item in excess of a location's peak requirements;
 - (2) Any order for a combination of items in excess of a location's peak requirements; or
 - (3) A series of orders from the same ordering office within 10 days, that together call for quantities exceeding the limitation in subparagraph (b)(1) or (2) of this clause.
- (c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this clause.
- (d) Notwithstanding paragraphs (b) and (c) of this clause, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 3 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

2.9. FAR 52.216-21 REQUIREMENTS (OCT 1995)

- (a) This is a requirements contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies or services specified in the Schedule are estimates only and are not purchased by this contract. Except as this contract may otherwise provide, if the Government's requirements do not result in orders in the quantities described as estimated or maximum in the Schedule, that fact shall not constitute the basis for an equitable price adjustment.
- (b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. Subject to any limitations in the Order Limitations clause or elsewhere in this contract, the Contractor shall furnish to the Government all supplies or services specified in the Schedule and called for by orders issued in accordance with the Ordering clause. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.
- (c) Except as this contract otherwise provides, the Government shall order from the Contractor all the supplies or services specified in the Schedule that are required to be purchased by the Government activity or activities specified in the Schedule.
- (d) The Government is not required to purchase from the Contractor requirements in excess of any limit on total orders under this contract.
- (e) If the Government urgently requires delivery of any quantity of an item before the earliest date that delivery may be specified under this contract, and if the Contractor will not accept an order providing for the accelerated delivery, the Government may acquire the urgently required goods or services from another source.
- (f) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that

the Contractor shall not be required to make any deliveries under this contract 10 days after expiration of the period of performance specified in Section 1.5.

(End of clause)

2.10. FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

- (a) The Government may extend the term of this contract by written notice to the Contractor within 10 days prior to contract expiration; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension, nor shall the failure to provide such timely notice waive the Government's right to exercise such options in the absence of objection by the Contractor.
- (b) It is understood that any continued performance from period to period shall be at the sole determination of the Government and will be contingent upon prior satisfactory performance.
- (c) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (d) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

(End of clause)

2.11. FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) - ALTERNATE I (JULY 1995)

2.12. FAR 52.232-18 AVAILABILITY OF FUNDS (APR 1984)

Funds are not presently available for performance under this contract beyond TBD. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond TBD, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

2.13. FAR 52.245-1 GOVERNMENT PROPERTY (JUNE 2007) - ALT I (JUNE 2007)

2.14. FAR 52.247-34 F.O.B. DESTINATION (NOV 1991)

2.15. FAR 52.247-66 RETURNABLE CYLINDERS (MAY 1994)

- (a) Cylinder, referred to in this clause, is a pressure vessel designed for pressures higher than 40 psia and having a circular cross section excluding a portable tank, multi-tank car tank, cargo tank or tank car.

- (b) Returnable cylinders shall remain the Contractor's property but shall be loaned without charge to the Government for the period of days specified in Attachment 01 (hereafter referred to as loan period) following the day of delivery to the f.o.b. point specified in the contract. Any cylinder not returned within the loan period shall be charged a daily rental beginning with the first day after the loan period expires, to and including the day the cylinders are delivered to the Contractor (if the original delivery was f.o.b. origin) or are delivered or made available for delivery to the Contractor's designated carrier (if the original delivery was f.o.b. destination). The Government shall pay the Contractor the rental fee specified in Attachment 01 per cylinder, per day, computed separately for cylinders by type, size, and capacity and for each point of delivery named in the contract. No rental shall accrue to the Contractor in excess of replacement value per cylinder specified in paragraph (c) of this clause.
- (c) For each cylinder lost or damaged beyond repair while in the Government's possession, the Government shall pay to the Contractor the replacement value, less the allocable rental paid for that cylinder as follows: TBD. These cylinders shall become Government property.
- (d) If any lost cylinder is located within 90 calendar days after payment by the Government, it may be returned to the Contractor by the Government, and the Contractor shall pay to the Government an amount equal to the replacement value, less rental computed in accordance with paragraph (b) of this clause, beginning at the expiration of the loan period specified in paragraph (b) of this clause, and continuing to the date on which the cylinder was delivered to the Contractor.

(End of clause)

2.16. FAR 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE. (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address:

<http://www.acquisition.gov/far>

(End of clause)

2.17. NFS 1852.215-84 OMBUDSMAN. (NOV 2011)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, whose name, address, telephone number, facsimile number, and email address may be found at:

http://prod.nais.nasa.gov/pub/pub_library/Omb.html.

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the Agency ombudsman identified at the above URL. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(End of clause)

2.18. NFS 1852.219-76 NASA 8 PERCENT GOAL (JULY 1997)

(a) Definitions.

“Historically Black Colleges or University,” as used in this clause, means an institution determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

“Minority institutions,” as used in this clause, means an institution of higher education meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which for the purposes of this clause includes a Hispanic-serving institution of higher education as defined in section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

“Small disadvantaged business concern,” as used in this clause, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124.

“Women-owned small business concern,” as used in this clause, means a small business concern (1) which is at least 51 percent owned by one or more women or, in the case of any publicly owned

business, at least 51 percent of the stock of which is owned by one or more women, and (2) whose management and daily business operations are controlled by one or more women.

- (b) The NASA Administrator is required by statute to establish annually a goal to make available to small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns, at least 8 percent of NASA's procurement dollars under prime contracts or subcontracts awarded in support of authorized programs, including the space station by the time operational status is obtained.
- (c) The contractor hereby agrees to assist NASA in achieving this goal by using its best efforts to award subcontracts to such entities to the fullest extent consistent with efficient contract performance.
- (d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns.

(End of clause)

2.19. NFS 1852.223-70 SAFETY AND HEALTH (APR 2002)

- (a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.
- (b) The Contractor shall take all reasonable safety and occupational health measures in performing this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.
- (c) The Contractor shall take, or cause to be taken, any other safety, and occupational health measures the Contracting Officer may reasonably direct. To the extent that the Contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable adjustment shall be determined pursuant to the procedures of the changes clause of this contract; provided, that no adjustment shall be made under this Safety and Health clause for any change for which an equitable adjustment is expressly provided under any other clause of the contract.
- (d) The Contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the contract Schedule; or property loss of \$25,000 or more, or Close Call (a situation or occurrence with no injury, no damage or only minor damage (less than \$1,000) but possesses the potential to cause any type mishap, or any injury, damage, or negative mission impact) that may be of immediate interest to NASA, arising out of work performed under this contract. The Contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. In addition, service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the contract Schedule.
- (e) The Contractor shall investigate all work-related incidents, accidents, and Close Calls, to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as

the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(f)

(1) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. When the Contracting Officer becomes aware of noncompliance that may pose a serious or imminent danger to safety and health of the public, astronauts and pilots, the NASA workforce (including contractor employees working on NASA contracts), or high value mission critical equipment or property, the Contracting Officer shall notify the Contractor orally, with written confirmation. The Contractor shall promptly take and report any necessary corrective action.

(2) If the Contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (f) (1) of this clause, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.

(g) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (g) and any applicable Schedule provisions and clauses, with appropriate changes of designations of the parties, in all solicitations and subcontracts of every tier, when one or more of the following conditions exist:

(1) The work will be conducted completely or partly on premises owned or controlled by the Government.

(2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.

(3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).

(4) When the Contractor (or subcontractor or supplier) determines that the assessed risk and consequences of a failure to properly manage and control the hazard(s) warrants use of the clause.

(h) The Contractor (or subcontractor or supplier) may exclude the provisions of paragraph (g) from its solicitation(s) and subcontract(s) of every tier when it determines that the clause is not necessary because the application of the OSHA and DOT (if applicable) regulations constitute adequate safety and occupational health protection. When a determination is made to exclude the provisions of paragraph (g) from a solicitation and subcontract, the Contractor must notify and provide the basis for the determination to the Contracting Officer. In subcontracts of every tier above the micro-purchase threshold for which paragraph (g) does not apply, the Contractor (or subcontractor or supplier) shall insert the substance of paragraphs (a), (b), (c), and (f) of this clause).

(i) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the Contractor's safety and occupational health measures under this clause.

(j) The contractor shall continually update the safety and health plan when necessary. In particular, the Contractor shall furnish a list of all hazardous operations to be performed, and a list of other

major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the Contractor. NASA and the Contractor shall jointly decide which operations are to be considered hazardous, with NASA as the final authority. Before hazardous operations commence, the Contractor shall submit for NASA concurrence –

- (1) Written hazardous operating procedures for all hazardous operations; and/or
- (2) Qualification standards for personnel involved in hazardous operations.

(End of clause)

2.20. NFS 1852.223-75 MAJOR BREACH OF SAFETY OR SECURITY (FEB 2002) - ALTERNATE I (FEB 2006)

- (a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. Safety is essential to NASA and is a material part of this contract. NASA's safety priority is to protect: (1) the public; (2) astronauts and pilots; (3) the NASA workforce (including contractor employees working on NASA contracts); and (4) high-value equipment and property. A major breach of safety may constitute a breach of contract that entitles the Government to exercise any of its rights and remedies applicable to material parts of this contract, including termination. A major breach of safety must be related directly to the work on the contract. A major breach of safety is an act or omission of the Contractor that consists of an accident, incident, or exposure resulting in a fatality or mission failure; or in damage to equipment or property equal to or greater than \$1 million; or in any "willful" or "repeat" violation cited by the Occupational Safety and Health Administration (OSHA) or by a state agency operating under an OSHA approved plan.
- (b) Security is the condition of safeguarding against espionage, sabotage, crime (including computer crime), or attack. A major breach of security may constitute a breach of contract that entitles the Government to exercise any of its rights and remedies applicable to material parts of this contract, including termination. A major breach of security may occur on or off Government installations, but must be related directly to the work on the contract. A major breach of security is an act or omission by the Contractor that results in compromise of classified information, illegal technology transfer, workplace violence resulting in criminal conviction, sabotage, compromise or denial of information technology services, equipment or property damage from vandalism greater than \$250,000, or theft greater than \$250,000.
- (c) In the event of a major breach of safety or security, the Contractor shall report the breach to the Contracting Officer. If directed by the Contracting Officer, the Contractor shall conduct its own investigation and report the results to the Government. The Contractor shall cooperate with the Government investigation, if conducted.

(End of clause)

2.21. NFS 1852.242-70 TECHNICAL DIRECTION (SEP 1993)

- (a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Representative (COR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 1842.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical

direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements of this contract.

- (b) The COR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that--
 - (1) Constitutes an assignment of additional work outside the statement of work;
 - (2) Constitutes a change as defined in the changes clause;
 - (3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
 - (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
 - (5) Interferes with the contractor's rights to perform the terms and conditions of the contract.
- (c) All technical direction shall be issued in writing by the COR.
- (d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COR in the manner prescribed by this clause and within the COR's authority. If, in the Contractor's opinion, any instruction or direction by the COR falls within any of the categories defined in paragraph (b) of this clause, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is--
 - (1) Rescinded in its entirety; or
 - (2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract, and that the Contractor should proceed promptly with its performance.
- (e) A failure of the contractor and contracting officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.
- (f) Any action(s) taken by the contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

(End of clause)

2.22. NFS 1852.245-76 LIST OF GOVERNMENT-FURNISHED PROPERTY (OCT 1988)

For performance of work under this contract, the Government will make available Government property identified below or in Attachment 03 of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at the sites designated in the attachment and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245 Government property clause of this contract, the Contractor is accountable for the identified property.

(End of clause)

SECTION 3. SPECIAL CONTRACT REQUIREMENTS

3.1. DELIVERY REQUIREMENTS

- (a) The contractor shall provide delivery capability for Government requirements to the applicable delivery destinations. Delivery conveyances must comply with applicable DOT regulations. The contractor shall comply with applicable safety standards and maintain purity of product during loading and delivery. The contractor shall develop, maintain, and make available to the Government all conveyance operating procedures. Note: The amount of delivery equipment shall be sufficient to allow for operational variations, maintenance, downtime, Department of Transportation (DOT) requirements, and contingency provisions
- (b) Loading and dispatching delivery conveyances shall be scheduled to assure arrival at destination during normal receiving hours as set forth in Attachment 3, or unless otherwise directed. The contractor shall ensure the on-schedule delivery of helium ordered by the Government. Loading and dispatching conveyances shall be scheduled to assure arrival at destination during normal receiving hours as set forth in Attachment 3, or unless otherwise directed. The Government will provide notice prior to requiring delivery of ordered product as set forth in Attachment 3. Less than 48 hours notice shall incur a short notice emergency delivery charge at the price per delivery.
- (c) The Contractor shall provide purge and cool-down services at the contractor's facility as required to meet applicable safety standards and to maintain purity of the product. The Contractor shall develop, maintain and make available to the Government all conveyance purge and cool-down procedures.
- (d) The contractor shall provide trained personnel necessary for offloading product from the tankers to the facility interface. User locations will provide personnel to operate facility equipment. During offloading, the contractor shall operate the tanker in accordance with approved procedures.
- (e) Ancillary equipment and services may be required to effect delivery of helium to satisfy Government requirements. Ancillary equipment and services includes, but is not limited to, temporary cryogenic storage vessels, liquid-to-gas conversion units (receivers, pumps, vaporizers, and associated piping), and other equipment and services to support related propellant requirements under this contract. The contracting officer administering the applicable delivery order will be notified of the ancillary requirement and will issue a delivery order modification with negotiated pricing. Note: Maintenance of Government property is the responsibility of the Government user location. However, services such as routine maintenance, repairs, inspections, and/or DOT required certifications may be obtained under this contract.

(End of clause)

3.2. MATERIAL INSPECTION AND RECEIVING

- (a) At the time of each delivery under this contract, the contractor shall furnish to the Government a Material Inspection and Receiving Report (DD Form 250 series or equivalent commercial document), prepared in triplicate (original and two copies). If the contractor elects to use the DD Form 250, it shall be prepared in accordance with NASA FAR Supplement 1846.6. Note: Equivalent commercial document must contain the same level of detail/specificity as the DD Form 250. The Contractor shall include with each Material Inspection Receiving Report a Laboratory Analysis Report pertaining to each shipment.

- (1) Upon delivery of product to the destination, each copy of the Material Inspection and Receiving Report shall be signed and dated by the receiver. The original shall remain with the contractor's driver making the delivery, and two copies shall be retained by the receiving destination as proof of delivery.
 - (2) A legible copy of the applicable contractor certified weight ticket or pressure/temperature readings will be attached to each copy of the Material Inspection and Receiving Report submitted for each delivery. The certified weight ticket or pressure/temperature readings shall include the associated shipment number and tanker and/or tube trailer number as cross reference to the Material Inspection and Receiving Report. The foregoing documentation will be submitted with all invoices.
 - (3) Contractor shall overprint, in an appropriate space on each Material Inspection and Receiving Report, any applicable tanker/trailer unloading demurrage invoiced in accordance with this contract. Such demurrage shall be certified by personnel of the receiving activity who are not in the employ of the contractor. At the Government's option, and when available, Government personnel may be required to certify demurrage charges.
- (b) The Laboratory Analysis Report shall be performed at the loading point of the conveyance for each shipment made under this contract. In case of liquid helium dewar shipments, provided the dewars are filled directly from a liquid helium tanker (and not an intermediate tank), the analysis can be conducted on the liquid helium tanker at the point of tanker loading. The analysis for the dewar shipment will reflect the tanker analysis the dewars were filled from. If multiple tankers are used to fill a dewar shipment, the analysis paperwork for all tankers will be provided with traceability between tankers and dewars. In the event laboratory facilities are not available to perform this analysis at the loading point, the Contractor will make arrangements to have the analysis performed at a location approved by the Contracting Officer. In any event, the analysis results shall be attached to the Material Inspection and Receiving Report.
- (c) A Certificate of Conformance shall also accompany each delivery to verify product quality and quantity. The Contractor's quality assurance representative shall sign and date the Certificate of Conformance to verify quantity, quality, and proper documentation (analysis report, etc.) at origin. The signed Certificate of Conformance shall be attached to, or entered on, copies of the Material Inspection and Receiving Report. The certificate of conformance shall be prepared in accordance with FAR 52.246-15, paragraph (d).

(End of clause)

3.3. METHOD OF MEASUREMENT FOR BILLING

- (a) Liquid helium: Determining the quantity of product delivered for billing purposes shall be accomplished in accordance with the following procedures: Scales used in determining weights as required by these procedures shall be certified and must meet all specifications and user requirements and tolerance as stated in the National Institute of Standards and Technology (NIST) Handbook 44. The maximum error will not exceed plus or minus two-tenths of 1 percent of the load being weighed. Such scales will be calibrated yearly and records of this calibration will be maintained for a minimum of one year and made available to the Contracting Officer or his designated representative upon request.
- (1) Bulk liquid helium tankers: The scales at the contractor fill location will be the preferred scales for determining tanker weights. In the event the contractor's scales are out of

operation or otherwise unavailable, an alternate scale can be used after approval by the contracting officer.

- (i) The weight of the delivered and returned helium will be determined as follows:
 - (A) For delivered helium: The tankers liquid nitrogen shields shall be filled prior to weighing the full tanker for delivery. The empty weight of the tanker with full nitrogen shields will be subtracted from the full shipped tanker weight with full nitrogen shields. The resulting weight will be the net amount of the delivered helium, for which the Government will pay. The following conversion factors will be applied to convert the weight to liters:

1 Pound = 3.631 Liters = 0.9590 Gallon = 96.72 Standard Cubic Feet
0.2754 Pound = 1 Liter = 0.2642 Gallon = 26.63 Standard Cubic Feet
1.042 Pounds = 3.785 Liters = 1 Gallon = 100.82 Standard Cubic Feet
 - (B) For returned helium: When the delivery is completed and the tanker is returned to the contractor, the returned tanker's liquid nitrogen shields shall be filled prior to weighing the tanker. The empty weight of the tanker with full nitrogen shields will be subtracted from the returned tanker weight with full nitrogen shields. The resulting weight will be the weight of the returned helium, for which the Government will receive residual credit as specified in Attachment 01. Conversion factors as cited in paragraph (a)(1)(i) of this clause will be applied to convert the weight to liters.
 - (ii) A copy of the contractor certified weight ticket(s), with shipment number and trailer/container number affixed, will accompany the Material Inspection and Receiving Report for payment.
- (2) Liquid helium dewars: The scales at the contractor fill location will be the preferred scales for determining the weight of liquid helium delivered in dewars. In the event the contractor's scales are out of operation or otherwise unavailable, an alternate scale can be used after approval by the contracting officer. The tare weight of the dewar will be subtracted from the gross weight and the resulting figure will be net amount for which the Government will pay. A copy of the contractor certified weight ticket(s), with shipment number and trailer/container number affixed, will accompany the Material Inspection and Receiving Report for payment.
- (b) Gaseous helium: The contractor shall utilize Bureau of Mines Information Circular 8367, "Computing Volume of Helium In Cylindrical Steel Containers at 10 to 10,000 PSIA of April 1997 to determine the amount of helium supplied. The contractor's utilization of a computerized measurement system utilizing calculations based on the Bureau of Mines Information Circular 8367 will be considered acceptable.
 - (c) Alternate method: The Contractor may utilize a method of product measurement, other than those set forth above, provided it is first approved, and authorized in writing, by the Contracting Officer.
- (End of clause)

3.4. RESIDUAL CREDIT

- (a) For bulk liquid helium deliveries in liquid helium tankers the contractor shall provide a credit to the delivery point for residual liquid helium remaining in bulk liquid helium tankers upon return to the contractor. The amount of the residual credit shall be calculated as follows:

- (1) If the weight of the returned helium is equal to or less than 1550 pounds, in accordance with the Section 3.3. Method of Measurement for Billing, the residual credit will be computed by multiplying the amount of returned helium, (converted to liters using the conversion rates specified in Section 3.3. Method of Measurement for Billing), by the price stated in paragraph (b)(2) of this clause for the appropriate contract year.
 - (2) If the weight of the returned helium is greater than 1,550 pounds, in accordance with Section 3.3. Method of Measurement for Billing, the residual credit will be limited to 1550 pounds. The residual credit is computed by multiplying 1550 pounds (converted to liters using the conversion rates specified in Section 3.3. Method of Measurement for Billing), by the price stated in paragraph (b)(2) of this clause for the appropriate contract year.
 - (3) The weight of returned helium in the tanker shall be documented after pickup. The amount of returned helium shall be determined in accordance with Section 3.3. Method of Measurement for Billing. Conversion rates identified in Section 3.3. Method of Measurement for Billing, will be used to convert the weight to liters.
 - (4) Examples:
 - (i) Example 1: Contractor picks up tanker with 1360 pounds remaining. Residual credit for 1360 pounds is calculated in accordance with paragraph (a)(1) above.
 - (ii) Example 2: Contractor picks up same trailer with 1740 pounds remaining. Residual credit is calculated in accordance with paragraph (a)(2) above and is limited to 1550 pounds.
- (b) For bulk gaseous helium deliveries in tube trailers the contractor shall provide a credit to the delivery point for residual gaseous helium remaining in bulk gas tube trailers upon return to the contractor. The amount of the residual credit shall be calculated as follows:
- (1) If a delivery point uses, takes or otherwise offloads at least 80 percent of the bulk gas trailer's original volume, then the residual credit will be computed by multiplying the amount of residual helium, in scf, remaining in the trailer by the price stated in Section 1.7.1. Product Unit Pricing. Original volume is defined as the volume of the trailer when loaded for shipment at the contractor's final distribution facility and tendered for receipt by the delivery point.
 - (2) If the delivery point uses, takes or otherwise offloads less than 80 percent, of the bulk gas trailer's original volume, then the residual credit will be computed at a reduced rate by multiplying the amount of residual helium, in scf, remaining in the trailer by the price established in Attachment 01.
 - (3) The volume of helium in the tube trailer shall be documented prior to drop off at the delivery point and again at pickup. The amount of volume shall be determined in accordance with Section 3.3. Method of Measurement for Billing. The use, take or offload is the difference between the two volumes. To convert to a percentage, divide the use, take or offload by the original volume at drop-off.
 - (4) Examples:
 - (i) Example 1: Contractor drops off trailer containing 190,000 scf. Contractor later picks up same trailer with 20,000 scf remaining. The use, take or offload is 170,000 scf, or 89.5 percent of original volume. Residual credit for 20,000 scf is calculated per paragraph (b)(1) above.
 - (ii) Example 2: Contractor drops off trailer containing 200,000 scf. Contractor later picks up same trailer with 75,000 scf remaining. The use, take or offload is 125,000 scf, or 62.5

percent of original volume. Residual credit for 75,000 scf is calculated per paragraph (b)(2) above.

(End of clause)

3.5. DEMURRAGE

The Government will pay the contractor demurrage for all delays in unloading propellant delivery tankers/trailers in excess of 4 hours after arrival and check-in at place of delivery, if such delay is without the fault or negligence of the contractor and is not caused by the failure of the contractor's equipment. If more than one tanker/trailer is scheduled for the same arrival time, demurrage charges shall begin 4 hours after arrival time of the last tanker/trailer in the group, and end at the release of the last tanker/trailer in the group. This unloading demurrage charge shall be paid the contractor per quarter-hour or fraction thereof. No demurrage charges shall be billed or paid for the loading of any propellant delivery tankers/trailers. If the free time has been exceeded, the driver, upon leaving the site, shall leave the consignee written documentation showing the date, time of arrival, time of departure, cause of delay, if known, and information identifying the shipment. The driver shall sign such documentation and shall request the consignee to do likewise. A copy thereof, as proof of delay, shall accompany all invoices for demurrage. Reasons for such delay shall be annotated on the Material Inspection and Receiving Report (i.e., Block 23C of the DD Form 250), and signed by the driver. Contractor shall ensure that all deliveries from a multi-source operation shall be effected at the lowest overall cost to the Government.

(End of clause)

3.6. PRODUCT INTEGRITY CONTROL

- (a) The Contractor shall furnish seals to prevent tampering with tube trailers and tankers or conveyances. The seals must easily identify any attempted tampering. The contractor shall seal all conveyances prior to shipment.
- (b) The Contractor shall inspect each loaded conveyance just prior to shipment to ensure all end connections are protected with dust covers (or other protectors) and there is no leakage of product. Note: The Contractor shall clean and seal all drain and fill ports prior to shipment from the facility, and maintain the cleanliness of shipping container interfaces, transfer hoses, and fittings.
- (c) Upon arrival at the delivery point interface, conveyances shall be visually inspected by the receiving activity for hazardous conditions, cleanliness, and seal integrity. Any discrepancy is cause for rejection.

(End of text)

3.7. QUALITY ASSURANCE, INSPECTION AND ACCEPTANCE

- (a) Unless otherwise directed by the Contracting Officer, in-process inspection, end-item inspection, and test verification shall be performed by the Contractor at the Contractor's facilities, to ensure compliance with the contract requirements. The Government may perform periodic inspections or audits at the contractor's facilities to verify, inspect, and ensure that supplies meet the contract requirements, including calibrations, process control monitoring, drawings and specifications.

- (b) Any delivery location will have the option to sample helium being delivered and analyze it for impurities prior to off-loading the transport vehicle or container. Such sampling shall be subject to demurrage charges, as applicable in accordance with this contract. If the sample does not meet specification requirements, the load will not be accepted and will be returned to the Contractor's final distribution facility for disposition. In case of non-acceptance, no product, transportation, demurrage, or any other costs will be charged to, or be paid by the Government.
- (c) The Contractor shall maintain records of inspections and tests performed on the items of this contract. All records and tests shall be traceable to the helium delivered and shall include applicable tanker/trailer number, serial number, lot number, or any other acceptable method of identification. These records shall be made available to the Government, upon request, during the performance of this contract and for 180 days after delivery of the item(s).
- (d) The Contractor shall develop and maintain documentation of a quality control program, including but not limited to: plant operating procedures (as they relate to quality provisions); helium handling procedures; loading and off-loading of shipping conveyances; storage; analytical instruments and scale calibrations; sampling; and analysis. Operating plans or procedures shall be submitted to the Government upon request. Final inspection and acceptance shall be accomplished at the receiving destination. Acceptance shall be accomplished subject to Section 3.3. Method of Measurement for Billing. Acceptance shall occur upon signoff by the receiving destination on the appropriate Material Inspection Receiving Report.

(End of clause)

3.8. GOVERNMENT'S INABILITY TO ACCEPT DELIVERY

When the contractor makes a delivery to a destination and the delivery conveyance cannot be accepted due to storage tank problems or for other reasons under the control of the receiving organization, and through no fault of the contractor, product charges will not be incurred; however, transportation charges will be based on the round-trip miles at the transportation price per mile specified in Attachment 01. Roundtrip mileage shall be from the final distribution facility identified in Attachment 02, and based on the current Rand-McNally Practical Routing Mileage Guide.

(End of clause)

3.9. FAILURE TO DELIVER

Subject to provisions of FAR 52.212-4(m), Termination for Cause, the Government reserves the right to mitigate any contractor caused failure to deliver. In the event the Contractor is unable to meet its delivery obligations from the specified sources, the Contractor may supply the deficient quantities from other sources at the prices agreed to in this contract. If such deficient quantities are not so supplied, the Government may acquire helium from other sources to the level of the quantities deficient, and the Contractor will pay the Government the difference between the delivered price from such other source and the applicable delivered price under this contract. In the event the contractor continues to fail to deliver, correct deficiencies or comply with contract terms and conditions, the Government may invoke its right to terminate for cause.

(End of clause)

3.10. UNFORECASTED REQUIREMENTS

- (a) The government reserves the right to add delivery locations and/or obtain helium supplies on an F.O.B origin basis. These unforecasted requirements may be of a temporary or recurring nature. The contractor's F.O.B origin price for liquid and gaseous helium and the transportation charged per mile from the F.O.B origin point to unforecasted destinations for each contract year is established in Attachment 01.
- (b) The government will notify the contractor at least 10 days prior to establishing a new delivery point. The government and the contractor will mutually agree on the distance in miles between the F.O.B origin point and the new delivery point using the Rand McNally Practical Routing Mileage Guide.
- (c) The contractor may refuse to service an unforecasted destination, by sending written notice to the contracting officer within 10 days of receiving the Government's notice to establish the unforecasted destination. Once the contractor initiates service to an unforecasted destination, the right to refuse is no longer applicable. The contractor may propose a standard price schedule which would be valid at all transfill/distribution points, or identify multiple price schedules, and identifying their multiple points of origin. Residual Credit will apply.

(End of clause)

3.11. FLASH REPORTS

The contractor shall provide the contracting officer or his designated representative, with an immediate verbal Flash Report of any accident or incident which may have an adverse impact on the contractor's ability to deliver liquid and gaseous helium to the Government, such as a plant outage (scheduled or unscheduled), tanker or tube trailer malfunction, or of any other occurrence in which the Government could reasonably be expected to have an interest by virtue of this contract. Such Flash Reports shall be confirmed in writing (electronic submission), in appropriate detail. Except as otherwise provided in this contract, the cost of data to be furnished in response to this clause is included in the price of this contract.

(End of clause)

3.12. COMPLIANCE WITH HELIUM STEWARDSHIP ACT OF 2013

This helium procurement will be subject to the provisions of the Helium Stewardship Act of 2013, including NASAs continued participation in the Federal "In Kind" program for crude helium, managed thru the Bureau of Land Management (BLM).

Per the Helium Stewardship Act of 2013:

"...Federal users may purchase refined helium with priority pipeline access under this subsection from persons who have entered into enforceable contracts to purchase an equivalent quantity of crude helium at the in-kind price from the Secretary..."

The contractor shall provide notice to the U.S. Department of the Interior, Bureau of Land Management, Helium Operations, 801 South Fillmore, Suite 500, Amarillo, TX 79101 that it has been awarded a contract to supply helium to the National Aeronautics and Space Administration.

The contractor, or its subcontractor(s), shall enter into an enforceable contract to purchase an equivalent amount of crude helium from the Bureau of Land Management, referred to as an "In Kind Crude Helium Sales Contract."

(End of clause)

3.13. HELIUM USAGE AT OTHER LOCATIONS

The helium provided to the delivery locations are for use at those locations and not intended to be further transported by an end user to off-site locations not already directly supported by the delivery location. No further transportation of delivered product by an end user to any off site location will be permitted without specific written approval of the Contracting Officer. This restriction is required to avoid potential issues should an end user decide to transport product to another off-site location in order to supplement or replace an existing commercial helium supply at that off site location.

(End of clause)

3.14. MEMORANDUMS OF UNDERSTANDING (MOU) BETWEEN NASA LOCATIONS AND BLM

Following award of the contract, NASA intends to issue Memorandums of Understanding (MOUs) between individual locations under the contract and the Bureau of Land Management (BLM). These MOU agreements are anticipated to be put in place no later than 120 days from contract award, subject to the conditions listed below.

The forecasting requirement of the MOUs to the BLM will not take place until the BLM initiates allocation reductions of crude helium to refiners along the Crude Helium Pipeline (CHPL) and this allocation reduction is verified with the BLM. Reporting will not take place during surplus conditions of helium reported by the BLM.

Following verification of the allotment reduction by the BLM, the locations will individually initiate forecasting per the MOU (providing forecasts by the 15th of the month prior to the month in which delivery is required). This forecasting requirement will be discontinued once the BLM ends the allocation reductions (verified with the BLM), and not resume until the next verified allocation reduction is initiated by the BLM.

Also note that the BLM is intending to rewrite its helium regulations, with the potential of the MOU terms being incorporated into the revised regulations. At that time, the MOU clauses of the contract will be superseded by the related conditions of the revised helium regulations.

(End of clause)

SECTION 4. FAR 52.212-5 ATTACHMENT

4.1. FAR 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS - COMMERCIAL ITEMS. (JAN 2014)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

(2) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(3) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

X (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

X (2) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010)(Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

[] (3) 52.203-15, Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

[] (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (JUL 2013) (Pub. L. 109-282) (31 U.S.C. 6101 note).

[] (5) 52.204-11, American Recovery and Reinvestment Act-Reporting Requirements (JUL 2010) (Pub. L. 111-5).

[] (6) 52.204-14, Service Contract Reporting Requirements (JAN 2014) (Pub. L. 111-117, section 743 of Div. C).

[] (7) 52.204-15, Service Contract Reporting Requirements for Indefinite-Delivery Contracts (JAN 2014) (Pub. L. 111-117, section 743 of Div. C).

X (8) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (AUG, 2013) (31 U.S.C. 6101 note).

X (9) 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matters (JUL 2013) (41 U.S.C. 2313).

[] (10) 52.209-10, Prohibition on Contracting with Inverted Domestic Corporations (MAY 2012) (section 738 of Division C of Pub. L. 112-74, section 740 of Division C of Pub. L. 111-117, section 743 of Division D of Pub. L. 111-8, and section 745 of Division D of Pub. L. 110-161).

[] (11) 52.219-3, Notice of HUBZone Set-Aside or Sole-Source Award (NOV 2011) (15 U.S.C. 657a).

[] (12) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 2011) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

[] (13) (Reserved)

[] (14)(i) 52.219-6, Notice of Total Small Business Set-Aside (NOV 2011) (15 U.S.C. 644).

[] (ii) Alternate I (NOV 2011).

[] (iii) Alternate II (NOV 2011).

[] (15)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUN 2003) (15 U.S.C. 644).

[] (ii) Alternate I (OCT 1995) of 52.219-7.

[] (iii) Alternate II (MAR 2004) of 52.219-7.

[] (16) 52.219-8, Utilization of Small Business Concerns (JUL 2013) (15 U.S.C. 637 (d)(2) and (3)).

[] (17)(i) 52.219-9, Small Business Subcontracting Plan (JUL 2013) (15 U.S.C. 637(d)(4)).

[] (ii) Alternate I (OCT 2001) of 52.219-9.

[] (iii) Alternate II (OCT 2001) of 52.219-9.

[] (18) 52.219-13, Notice of Set-Aside of Orders (NOV 2011) (15 U.S.C. 644(r)).

[] (19) 52.219-14, Limitations on Subcontracting (NOV 2011) (15 U.S.C. 637(a)(14)).

[] (20) 52.219-16, Liquidated Damages-Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).

[] (21)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (OCT 2008) (10 U.S.C. 2323)(if the offeror elects to waive the adjustment, it shall so indicate in its offer.)

[] (ii) Alternate I (JUN 2003) of 52.219-23.

[] (22) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (JUL 2013) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

[] (23) 52.219-26, Small Disadvantaged Business Participation Program-Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

[] (24) 52.219-27, Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (NOV 2011) (15 U.S.C. 657f).

X (25) 52.219-28, Post Award Small Business Program Rerepresentation (JUL 2013) (15 U.S.C. 632(a)(2)).

[] (26) 52.219-29, Notice of Set-Aside for Economically Disadvantaged Women-Owned Small Business (EDWOSB) Concerns (JUL 2013) (15 U.S.C. 637(m)).

[] (27) 52.219-30, Notice of Set-Aside for Women-Owned Small Business (WOSB) Concerns Eligible Under the WOSB Program (JUL 2013) (15 U.S.C. 637(m)).

X (28) 52.222-3, Convict Labor (JUN 2003) (E.O. 11755).

X (29) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (JAN 2014) (E.O. 13126).

X (30) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).

X (31) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

X (32) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212).

X (33) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793).

X (34) 52.222-37, Employment Reports on Veterans (SEP 2010) (38 U.S.C. 4212).

X (35) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496).

[] (36) 52.222-54, Employment Eligibility Verification (AUG 2013). (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)

[] (37)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Items (MAY 2008) (42 U.S.C. 6962(c)(3)(A)(ii)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

[] (ii) Alternate I (MAY 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

[] (38) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b).

[] (39)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).

[](ii) Alternate I (DEC 2007) of 52.223-16.

X (40) 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011)

X (41) 52.225-1, Buy American Act - Supplies (FEB 2009) (41 U.S.C. 10a-10d).

[] (42)(i) 52.225-3, Buy American Act-Free Trade Agreements-Israeli Trade Act (NOV 2012) (41 U.S.C. chapter 83, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, 19 U.S.C. 4001 note, Pub. L. 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43).

[] (ii) Alternate I (MAR 2012) of 52.225-3.

[] (iii) Alternate II (MAR 2012) of 52.225-3.

[] (iv) Alternate III (NOV 2012) of 52.225-3.

[] (43) 52.225-5, Trade Agreements (NOV 2013) (19 U.S.C. 2501, *et seq.*, 19 U.S.C. 3301 note).

X (44) 52.225-13, Restrictions on Certain Foreign Purchases (JUN 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

[] (45) 52.225-26, Contractors Performing Private Security Functions Outside the United States (JUL 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

[] (46) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (NOV 2007) (42 U.S.C. 5150).

[] (47) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (NOV 2007) (42 U.S.C. 5150).

[] (48) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

[] (49) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

X (50) 52.232-33, Payment by Electronic Funds Transfer - System for Award Management (JUL 2013) (31 U.S.C. 3332).

[] (51) 52.232-34, Payment by Electronic Funds Transfer - Other than System for Award Management (JUL 2013) (31 U.S.C. 3332).

[] (52) 52.232-36, Payment by Third Party (JUL 2013) (31 U.S.C. 3332).

[] (53) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

[] (54)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).

[] (ii) Alternate I (APR 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

☐ (1) 52.222-41, Service Contract Act of 1965 "(NOV 2007)" (41 U.S.C. 351, et seq.).

☐ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

☐ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act-Price Adjustment (Multiple Year and Option Contracts) (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

☐ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act-Price Adjustment (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

☐ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements "(NOV 2007)" (41 U.S.C. 351, et seq.).

☐ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (FEB 2009) (41 U.S.C. 351, et seq.).

☐ (7) 52.222-17, Nondisplacement of Qualified Workers (JAN 2013) (E.O.13495).

☐ (8) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009) (Pub. L. 110-247).

☐ (9) 52.237-11, Accepting and Dispensing of \$1 Coin (SEP 2008) (31 U.S.C. 5112(p)(1)).

(d) *Comptroller General Examination of Record.* The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records - Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or

maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

(ii) 52.219-8, Utilization of Small Business Concerns (JUL 2013) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$650,000 (\$1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) 52.222-17, Nondisplacement of Qualified Workers (JAN 2013) (E.O. 13495). Flow down required in accordance with paragraph (l) of FAR clause 52.222-17.

(iv) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212).

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793).

(vii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause 52.222-40.

(viii) 52.222-41, Service Contract Act of 1965 "(NOV 2007)" (41 U.S.C. 351, et seq.).

(ix) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

___ Alternate I (AUG 2007) of 52.222-50 (22 U.S.C. 7104(g)).

(x) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements "(NOV 2007)" (41 U.S.C. 351, et seq.).

(xi) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (FEB 2009)(41 U.S.C. 351, et seq.).

(xii) 52.222-54, Employment Eligibility Verification (AUG 2013).

(xiii) 52.225-26, Contractors Performing Private Security Functions Outside the United States (JUL 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xiv) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009) (Pub. L. 110-247). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(xv) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

SECTION 5. CONTRACT DOCUMENTS, EXHIBITS OR ATTACHMENTS

5.1. LIST OF ATTACHMENTS

ATTACH. NUMBER	TITLE	PAGES
1	OTHER CONTRACT PRICING	9
2	CAPABILITY FORM	2
3	STATEMENT OF WORK	37
4	PIV CARD ISSUANCE PROCEDURES	4
5	DELIVERY ANALYSIS TABLE	2

(End of Clause)

SECTION 6. ADDENDUM TO 52.212-1, INSTRUCTIONS TO OFFERORS - COMMERCIAL ITEMS

6.1. FAR 52.212-1 INSTRUCTIONS TO OFFERORS - COMMERCIAL ITEMS (JUL 2013)

6.2. FAR 52.204-7 SYSTEM FOR AWARD MANAGEMENT. (JUL 2013)

6.3. FAR 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address:

<http://www.acquisition.gov/far>

(End of provision)

6.4. COMMUNICATIONS REGARDING THIS SOLICITATION

- (a) Questions or comments regarding this solicitation must be submitted in writing, cite the solicitation number, and be directed to the following Government representative:

Steven B. Peterson

steven.b.peterson@nasa.gov

Oral questions will not be answered due to the possibility of misunderstanding or misinterpretation.

- (b) Questions or comments should be submitted by July 25, 2014 to allow for analysis and dissemination of responses in advance of the proposal due date: Late questions or comments are not guaranteed a response prior to the proposal due date.
- (c) Questions or comments shall not be directed to the technical activity personnel.

(End of provision)

6.5. DUE DATE FOR RECEIPT OF PROPOSALS

See Block 8 of Standard Form 1449 (page 1)

(End of provision)

6.6. DELIVERY INSTRUCTIONS FOR PROPOSALS

Proposals shall be delivered electronically to the following address: steven.b.peterson@nasa.gov by the time and date referenced in Block 8 of standard Form 1449 (page 1). Maximum email size: 3MB per email. Offerors may submit multiple emails.

(End of Provision)

SECTION 7. PROPOSAL CONTENT

Proposal Volume 1: Technical Acceptability

Proposal Volume 2: Pricing

Proposal Volume 3: Safety and Health Plan

Proposal Volume 4: Use of Government-Owned Property Declaration

Proposal Volume 5: Submission of Electronic Funds Transfer Information

(End of provision)

7.1. TECHNICAL ACCEPTABILITY

Prospective offerors are required to provide the following information to determine technical acceptability: The offeror shall utilize the attached Capability Form (Attachment 02) to identify its production, storage, and distribution facilities that will be used to produce and deliver requirements for each applicable CLIN. Multiple CLINs may be provided on 1 form and additional information may be provided on a separate page.

Note: Capability relates to the offeror's ability to meet CLIN requirements. Capability is a function of production, distribution, and any other information that demonstrates the offeror's ability to meet CLIN requirements. Proposals failing to provide evidence demonstrating that the offeror has the necessary capability to successfully meet the requirements of a CLIN will be considered technically unacceptable for that CLIN.

(End of provision)

7.2. PRICING

- (a) Offeror shall complete the table at Section 1.7.1. Product Unit Pricing, enter the unit price of helium (i.e., product price) for each contract year using the assumed cost of crude helium provided in Section 1.8. Price Adjustment for Variances in Government-Controlled Crude Helium Prices. Note: Offers that fail to state a product unit price in all contract and option years for a particular CLIN will be considered non-responsive for that CLIN. Additionally, the offeror shall complete the entire table at Section 1.7.2. Delivery Fee.
- (b) Attachment 01:
 - (1) Demurrage Schedule: Offeror shall complete the demurrage sheet by inserting the applicable demurrage terms as appropriate (refer to the "Demurrage" clause for more information). Any special conditions regarding demurrage shall be explained by the offeror. Demurrage price for each contract year shall be recorded. Offeror is authorized to insert ALL in the delivery point field, only if the applicable charges apply to all CLINS.
 - (2) Purging and Cool-Down Schedule: Offerors shall enter their price for purging and cool down of tankers and dewars. Purging and cool-down charges must be recorded for each contract year. Any special conditions regarding purging and cool down shall be explained by the offeror. Offeror is authorized to insert ALL in the delivery point field, only if the applicable charges apply to all CLINS. If applicable, offerors may tailor the price schedule to reflect pricing tiers based on temperature ranges.
 - (3) Maintenance Schedule: Offeror shall identify and price any maintenance and leasing charges they may wish to include in the contract. Examples include: 30 day lease of bulk gas tube trailer; hydrostatic testing of cylinders; valve replacement; and painting. Offerors shall ensure

that proposed prices are either in accordance with a commercial published price list or that prices are equal to or better than those offered to their most favored customer.

- (4) Inability to Accept Delivery Schedule: Offeror shall complete the table by inserting the applicable information in the appropriate fields. Charges must be recorded for each contract year. Offeror is authorized to insert ALL in the delivery point field, only if the applicable charges apply to all CLINS.
- (5) One Way Charge Schedule: The offeror will enter transportation charges in the instance that the contractor is directed to drop or pick up a trailer or tanker and is unable to haul another trailer or tanker for half the route (also known as a dead-head or bob-tail run). Charges must be recorded for each contract year. Offeror is authorized to insert ALL in the delivery point field, only if the applicable charges apply to all CLINS.
- (6) Unforecasted Requirements: Offeror shall insert the applicable information in the appropriate fields. Charges must be recorded for each contract year.
- (7) Residual Credit: Offeror shall enter residual credit amount as required.
- (8) Discount Terms: Offeror shall enter discount terms. If no discount is provided, enter NT30 (Net 30 days) in the discount field. Discount terms must be recorded for each contract year. Offeror is authorized to insert ALL in the delivery point field, only if the applicable charges apply to all CLIN.

(End of provision)

7.3. NFS 1852.223-73 SAFETY AND HEALTH PLAN (NOV 2004)

- (a) The offeror shall submit a detailed safety and occupational health plan as part of its proposal (see NPR 8715.3, NASA Safety Manual, Appendices). The plan shall include a detailed discussion of the policies, procedures, and techniques that will be used to ensure the safety and occupational health of Contractor employees and to ensure the safety of all working conditions throughout the performance of the contract.
- (b) When applicable, the plan shall address the policies, procedures, and techniques that will be used to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), and high-value equipment and property.
- (c) The plan shall similarly address subcontractor employee safety and occupational health for those proposed subcontracts that contain one or more of the following conditions:
 - (1) The work will be conducted completely or partly on premises owned or controlled by the government.
 - (2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.
 - (3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).
 - (4) When the assessed risk and consequences of a failure to properly manage and control the hazards warrants use of the clause.

(d) This plan, as approved by the Contracting Officer, will be included in any resulting contract.

(End of provision)

7.4. NFS 1852.245-79 USE OF GOVERNMENT-OWNED PROPERTY (JULY 1997)

(a) The offeror [] does, [] does not intend to use in performance of any contract awarded as a result of this solicitation existing Government-owned facilities (real property or plant equipment), special test equipment, or special tooling (including any property offered by this solicitation). The offeror shall identify any offered property not intended to be used. If the offeror does intend to use any of the above items, the offeror must furnish the following information required by Federal Acquisition Regulation (FAR) 45.205(b), and NASA FAR Supplement (NFS) 1845.102-71:

- (1) Identification and quantity of each item. Include the item's acquisition cost if it is not property offered by this solicitation.
- (2) For property not offered by this solicitation, identification of the Government contract under which the property is accountable and written permission for its use from the cognizant Contracting Officer.
- (3) Amount of rent, calculated in accordance with FAR 45.403 and the clause at FAR 52.245-9, Use and Charges, unless the property has been offered on a rent-free basis by this solicitation.
- (4) The dates during which the property will be available for use, and if it is to be used in more than one contract, the amounts of respective uses in sufficient detail to support proration of the rent. This information is not required for property offered by this solicitation.

(b) The offeror [] does, [] does not request additional Government-provided property for use in performing any contract awarded as a result of this solicitation. If the offeror requests additional Government-provided property, the offeror must furnish --

- (1) Identification of the property, quantity, and estimated acquisition cost of each item; and
- (2) The offeror's written statement of its inability to obtain facilities as prescribed by FAR 45.302-1(a)(4).

(c) If the offeror intends to use any Government property (paragraph (a) or (b) of this provision), the offer must also furnish the following:

- (1) The date of the last Government review of the offeror's property control and accounting system, actions taken to correct any deficiencies found, and the name and telephone number of the cognizant property administrator.
- (2) A statement that the offeror has reviewed, understands, and can comply with all property management and accounting procedures in the solicitation, FAR Subpart 45.5, and NFS Subparts 1845.5 and 1845.71.
- (3) A statement indicating whether or not the costs associated with paragraph (c)(2) of this provision, including plant clearance and/or plant reconversion costs, are included in its cost proposal.

(End of provision)

7.5. FAR 52.232-38 SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER (MAY 1999)

The offeror shall provide, with its offer, the following information that is required to make payment by electronic funds transfer (EFT) under any contract that results from this solicitation. This submission satisfies the requirement to provide EFT information under paragraphs (b)(1) and (j) of the clause at 52.232-34, Payment by Electronic Funds Transfer - Other than Central Contractor Registration.

- (1) The solicitation number (or other procurement identification number).
- (2) The offeror's name and remittance address, as stated in the offer.
- (3) Data Universal Numbering System (DUNS) Number <<http://www.ccr.gov>>
- (4) Commercial and Government Entity (CAGE) Code <<http://www.ccr.gov>>
- (5) Name, title, and telephone number of the offeror's official authorized to provide this information.
- (6) The name, address, and 9-digit Routing Transit Number of the offeror's financial agent.
- (7) The offeror's account number and the type of account (checking, savings, or lockbox).
- (8) If applicable, the Fedwire Transfer System telegraphic abbreviation of the offeror's financial agent.
- (9) If applicable, the offeror shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the offeror's financial agent is not directly on-line to the Fedwire and, therefore, not the receiver of the wire transfer payment.

(End of provision)

SECTION 8. EVALUATION

8.1. PROPOSAL EVALUATION

Evaluation and award(s) will be made using the lowest price technically acceptable source selection process as described in FAR 15.101-2. One award for each CLIN (or grouped CLINs) will be made to the lowest price offeror that has been determined technically acceptable for the applicable CLIN(s). First, the Government will perform a price evaluation of all proposals as provided below. The total evaluated price for each CLIN or grouped CLINs will be recorded for each offeror (i.e., abstract of offers). A technical evaluation (as described below) will be performed for each low-price offeror for each CLIN or grouped CLINs group. Note: Based on the technical evaluation, proposals will be rated as technically acceptable or unacceptable. Only those offerors determined to be technically acceptable, either initially or as a result of clarifications, will be considered for award.

Note: Alternate pricing proposals will not be accepted. In addition, CLIN pricing contingent on award of multiple CLINs will not be accepted. If a low-price offeror is determined technically unacceptable after clarifications, the Government will perform a technical evaluation for the offeror with the next lowest CLIN or grouped CLINs evaluated price.

(a) Price Evaluation:

- (1) Step 1: Product Unit Price Evaluation. Offeror is advised that the Government will evaluate the unit prices for each CLIN by multiplying the offeror's unit price per year by the best estimated quantities specified for each respective year. This sum will be added for each contract year to determine the total evaluated CLIN product unit price. This process is provided in the below formula:

$$\text{TEPUP} = \sum [(PUP_{CY1} \times BEQ_{CY1}) + (PUP_{CY2} \times BEQ_{CY2}) \cdots]$$

Where,

TEPUP = Total evaluated CLIN product unit price

PUP_{CY1} = CLIN product unit price; the "CY1" means the CLIN unit price for contract year 1

BEQ_{CY1} = CLIN best estimated quantity; the "CY1" means the best estimated quantity for contract year 1

- (2) Step 2: Delivery Fee Evaluation. Offeror is advised that the Government will evaluate the delivery fee proposed for each CLIN. Note: Delivery fees vary by diesel fuel price threshold and are listed by location by container type. For example, the delivery fee location for CLIN 002 is ARC, Moffett Field, CA, and the applicable delivery fee is based on the dewar/cylinder container type. The Government will multiply the offeror's delivery fee (provided in Section 1.7.2. Delivery Fee) by the estimated yearly trips as provided in Attachment 05 for each contract year. The sum will be added for each contract year to determine the total evaluated CLIN delivery fee. This process is provided in the formula below. Note: A different diesel fuel threshold from Section 1.7.2. Delivery Fee will be utilized for each contract year. Thresholds will be predetermined (random selection) prior to release of the RFP.

$$\text{TEDF} = \sum [(FEE_{\alpha1} \times ED_{CY1}) + (FEE_{\alpha2} \times ED_{CY2}) \cdots]$$

Where,

TEDF = Total evaluated CLIN delivery fee

FEE_{α} = Delivery fee; the “ α 1” identifies a diesel fuel threshold as provided in Section 1.7.2. Delivery Fee.

ED_{CY1} = Estimated deliveries; the “CY1” means the estimated deliveries for contract year 1

- (3) Step 3: Total CLIN Evaluated Price. The total CLIN evaluated price will consist of the sum of the total product price, weighted at 80 percent and the total delivery fee, weighted at 20 percent. This process is provided in the formula provided below:

$$TEP = \sum [(TEPUP \times 0.80) + (TEDF \times 0.20)]$$

Where,

TEP = Total evaluated CLIN price

TEPUP = Total evaluated CLIN product unit price from Step 1

TEDF = Total evaluated CLIN delivery fee from Step 2

- (4) For grouped CLINS, add Step 1.1 after Step 1 and Step 2.1 after Step 2. Replace Step 3 with Step 3 ALT.

Step 1.1

$$TEPUP_{GROUP} = \sum [(TEPUP_{\beta 1} + TEPUP_{\beta 2} \cdots)]$$

Where,

$TEPUP_{GROUP}$ = Total evaluated grouped product unit price

$TEPUP_{\beta}$ = Total evaluated CLIN product unit price from Step 1; the “ β 1” identifies the CLIN

Step 2.1

$$TEDF_{GROUP} = \sum [(TEDF_{\beta 1} + TEDF_{\beta 2} + TEDF_{\beta 3} \cdots)]$$

Where,

$TEDF_{GROUP}$ = Total evaluated grouped delivery fee

$TEDF_{\beta}$ = Total evaluated CLIN delivery fee from Step 1; the “ β 1” identifies the CLIN

Step 3 ALT

$$TEP_{GROUP} = \sum [(TEPUP_{GROUP} \times 0.80) + (TEDF_{GROUP} \times 0.20)]$$

Where,

CEP = Total evaluated grouped price

$TEPUP_{GROUP}$ = Total evaluated grouped product unit price

$TEDF_{GROUP}$ = Total evaluated grouped delivery fee

- (b) Technical Evaluation: Technical acceptability will be determined from information submitted by the offeror, which must provide sufficient details to show that the offeror has the necessary capability to meet CLIN requirements. Proposals failing to provide evidence demonstrating that the offeror has the necessary capability to successfully meet the requirements of a CLIN will be considered technically unacceptable for that CLIN.

8.2. GROUPED CLINS

- (a) The following CLINs will be combined and 1 award will be made for each group of CLINs as provided below, based on the lowest evaluated (combined) price.
 - (1) Group 1: 018, 019 (JPL, Pasadena, CA)
 - (2) Group 2: 008, 009, 010 (GRC, Cleveland and Sandusky OH)
 - (3) Group 3: 004, 005, 006, 007 (CSBF, Fort Sumner, NM and Palestine, TX)
 - (4) Group 4: 016, 017 (JSC, Houston, TX)
 - (5) Group 5: 023, 024 (MSFC, MSFC, AL)
 - (6) Group 6: 025, 026 (MAF, New Orleans, LA)
 - (7) Group 7: 011, 012, 013, 014, 015 (GSFC, Greenbelt, MD)
 - (8) Group 8: 020, 021 (KSC, KSC, FL)
 - (9) Group 9: 031, 032, 033, 034, 035 (GSFC, Greenbelt, MD and WFF, Wallops Island, VA)
 - (10) Group 10: 036, 037 (JSC, Houston, TX)

8.3. OTHER

A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

SECTION 9. REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS

9.1. FAR 52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS-COMMERCIAL ITEMS. (NOV 2013) - ALTERNATE I (APR 2011)

An offeror shall complete only paragraph (b) of this provision if the offeror has completed the annual representations and certifications electronically via <http://www.acquisition.gov>. If an offeror has not completed the annual representations and certifications electronically at the System for Award Management (SAM) website, the offeror shall complete only paragraphs (c) through (o) of this provision.

(a) Definitions. As used in this provision-

Economically disadvantaged women-owned small business (EDWOSB) concern means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127. It automatically qualifies as a women-owned small business eligible under the WOSB Program.

Forced or indentured child labor means all work or service-

- (1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or
- (2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

Inverted domestic corporation, as used in this section, means a foreign incorporated entity which is treated as an inverted domestic corporation under 6 U.S.C. 395(b), i.e., a corporation that used to be incorporated in the United States, or used to be a partnership in the United States, but now is incorporated in a foreign country, or is a subsidiary whose parent corporation is incorporated in a foreign country, that meets the criteria specified in 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c). An inverted domestic corporation as herein defined does not meet the definition of an inverted domestic corporation as defined by the Internal Revenue Code at 26 U.S.C. 7874.

Manufactured end product means any end product in Federal Supply Classes (FSC) 1000-9999, except-

- (1) FSC 5510, Lumber and Related Basic Wood Materials;
- (2) Federal Supply Group (FSG) 87, Agricultural Supplies;
- (3) FSG 88, Live Animals;
- (4) FSG 89, Food and Related Consumables;

- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

Place of manufacture means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

Restricted business operations means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate-

- (1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;
- (2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;
- (3) Consist of providing goods or services to marginalized populations of Sudan;
- (4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;
- (5) Consist of providing goods or services that are used only to promote health or education; or
- (6) Have been voluntarily suspended.

Sensitive technology-

- (1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically-
 - (i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

Service-disabled veteran-owned small business concern-

(1) Means a small business concern-

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and size standards in this solicitation.

Subsidiary means an entity in which more than 50 percent of the entity is owned-

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

Veteran-owned small business concern means a small business concern-

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned business concern means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

Women-owned small business concern means a small business concern-

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

Women-owned small business (WOSB) concern eligible under the WOSB Program (in accordance with 13 CFR part 127), means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States.

(b)(1) Annual Representations and Certifications. Any changes provided by the offeror in paragraph (b)(2) of this provision do not automatically change the representations and certifications posted on the SAM website.

(2) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through <http://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications-Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs _____.

(Offeror to identify the applicable paragraphs at (c) through (o) of this provision that the offeror has completed for the purposes of this solicitation only, if any.

These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted electronically on SAM.)

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it ___ is, ___ is not a small business concern.

(2) Veteran-owned small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents as part of its offer that it ___ is, ___ is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2)

of this provision.) The offeror represents as part of its offer that it ___ is, ___ is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents, for general statistical purposes, that it ___ is, ___ is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents that it ___ is, ___ is not a women-owned small business concern.

(6) WOSB concern eligible under the WOSB Program. (Complete only if the offeror represented itself as a women-owned small business concern in paragraph (c)(5) of this provision.) The offeror represents that-

(i) It ☐ is, ☐ is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It ☐ is, ☐ is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(6)(i) of this provision is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture. (The offeror shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture: _____.) Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(7) Economically disadvantaged women-owned small business (EDWOSB) concern. (Complete only if the offeror represented itself as a WOSB concern eligible under the WOSB Program in (c)(6) of this provision.) The offeror represents that-

(i) It ☐ is, ☐ is not an EDWOSB concern, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It ☐ is, ☐ is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(7)(i) of this provision is accurate for each EDWOSB concern participating in the joint venture. (The offeror shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture: _____.) Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

Note to paragraphs (c)(8) and (9): Complete paragraphs (c)(8) and (9) only if this solicitation is expected to exceed the simplified acquisition threshold.

(8) Women-owned business concern (other than small business concern). (Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents that it ____ is, a women-owned business concern.

(9) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: _____.

(10) (Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.)

(i) General. The offeror represents that either-

(A) It ____ is, ____ is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the SAM Dynamic Small Business Search database maintained by the Small Business Administration, and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It ____ has, ____ has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(10)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. (The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: _____.)

(11) HUBZone small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents, as part of its offer, that-

(i) It ____ is, ____ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR Part 126; and

(ii) It ____ is, ____ is not a HUBZone joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (c)(11)(i) of this provision is accurate for each HUBZone small business concern participating in the HUBZone joint venture. (The offeror shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: _____.) Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

(12) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(10) of this provision.)

☐ Black American.

☐ Hispanic American.

☐ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

☐ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

☐ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

☐ Individual/concern, other than one of the preceding.

(d) Representations required to implement provisions of Executive Order 11246-

(1) Previous contracts and compliance. The offeror represents that-

(i) It ____ has, ____ has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It ____ has, ____ has not filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that-

(i) It ___ has developed and has on file, ___ has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), or

(ii) It ___ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$150,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) Buy American Act Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act-Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products, i.e., an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product." The terms "commercially available off-the-shelf (COTS) item," "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act-Supplies."

(2) Foreign End Products:

Line Item No. _____

Country of Origin: _____

(List as necessary)

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act-Free Trade Agreements-Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "Bahrainian, Moroccan, Omani, Panamanian, or Peruvian end product," "commercially available off-the-shelf (COTS) item," "component," "domestic end product," "end product," "foreign end product," "Free Trade Agreement country," "Free Trade Agreement country end product," "Israeli end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act."

(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Moroccan, Omani, Panamanian, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

Free Trade Agreement Country End Products (Other than Bahrainian, Moroccan, Omani, Panamanian, or Peruvian End Products) or Israeli End Products:

Line Item No. Country of Origin

(List as necessary)

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled "Buy American Act - Free Trade Agreements - Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products, i.e., an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product."

Other Foreign End Products

Line Item No. _____

Country of Origin: _____

(List as necessary)

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act - Free Trade Agreements - Israeli Trade Act Certificate, Alternate I. If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act - Free Trade Agreements - Israeli Trade Act":

Canadian End Products:

Line Item No. _____

\$(List as necessary)

(3) Buy American Act - Free Trade Agreements - Israeli Trade Act Certificate, Alternate II. If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act - Free Trade Agreements - Israeli Trade Act":

Canadian or Israeli End Products:

Line Item No.

Country of Origin

\$(List as necessary)

(g)(4) Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate III. If Alternate III to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Korean, Moroccan, Omani, Panamanian, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

Free Trade Agreement Country End Products (Other than Bahrainian, Korean, Moroccan, Omani, Panamanian, or Peruvian End Products) or Israeli End Products:

Line Item No. Country of Origin

(List as necessary)

(5) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(5)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements".

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products:

Line item No.: _____

Country of origin: _____

(List as necessary)

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Responsibility Matters (Executive Order 12689). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals-

(1) ___ Are, ___ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(2) ___ Have, ___ have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property,

(3) ___ Are, ___ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses enumerated in paragraph (h)(2) of this clause; and

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). (The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the

List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).)

(1) Listed end products.

Listed End Product: _____

Listed Countries of Origin: _____

(2) Certification. (If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.)

___ (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

___ (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(4) ___ Have, ___ have not, within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied.

(i) Taxes are considered delinquent if both of the following criteria apply:

(A) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(B) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) Examples. (A) The taxpayer has received a statutory notice of deficiency, under I.R.C. 6212, which entitles the taxpayer to seek Tax Court review of a

proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(B) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. 6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(C) The taxpayer has entered into an installment agreement pursuant to I.R.C. 6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(D) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. 362 (the Bankruptcy Code).

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). (The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).)

(1) Listed end products.

Listed End Product

[]

Listed Countries of Origin

[]

(2) Certification. (If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.)

___ (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

___ (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) Place of manufacture. (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly-

(1) ___ In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2) ___ Outside the United States.

(k) Certificates regarding exemptions from the application of the Service Contract Act. (Certification by the offeror as to its compliance with respect to the contract also constitutes its certification as to compliance by its subcontractor if it subcontracts out the exempt services.) (The contracting officer is to check a box to indicate if paragraph (k)(1) or (k)(2) applies.)

(1) ☐ Maintenance, calibration, or repair of certain equipment as described in FAR 22.1003-4(c)(1). The offeror ___ does ___ does not certify that-

(i) The items of equipment to be serviced under this contract are used regularly for other than Governmental purposes and are sold or traded by the offeror (or subcontractor in the case of an exempt subcontract) in substantial quantities to the general public in the course of normal business operations;

(ii) The services will be furnished at prices which are, or are based on, established catalog or market prices (see FAR 22.1003-4(c)(2)(ii)) for the maintenance, calibration, or repair of such equipment; and

(iii) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract will be the same as that used for these employees and equivalent employees servicing the same equipment of commercial customers.

(2) ☐ Certain services as described in FAR 22.1003-4(d)(1). The offeror ___ does ___ does not certify that-

(i) The services under the contract are offered and sold regularly to non-Governmental customers, and are provided by the offeror (or subcontractor in the case of an exempt subcontract) to the general public in substantial quantities in the course of normal business operations;

(ii) The contract services will be furnished at prices that are, or are based on, established catalog or market prices (see FAR 22.1003-4(d)(2)(iii));

(iii) Each service employee who will perform the services under the contract will spend only a small portion of his or her time (a monthly average of less than 20 percent of the available hours on an annualized basis, or less than 20 percent of available hours during the contract period if the contract period is less than a month) servicing the Government contract; and

(iv) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract is the same as that used for these employees and equivalent employees servicing commercial customers.

(3) If paragraph (k)(1) or (k)(2) of this clause applies-

(i) If the offeror does not certify to the conditions in paragraph (k)(1) or (k)(2) and the Contracting Officer did not attach a Service Contract Act wage determination to the solicitation, the offeror shall notify the Contracting Officer as soon as possible; and

(ii) The Contracting Officer may not make an award to the offeror if the offeror fails to execute the certification in paragraph (k)(1) or (k)(2) of this clause or to contact the Contracting Officer as required in paragraph (k)(3)(i) of this clause.

(l) Taxpayer Identification Number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to the SAM database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (l)(3) through (l)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) Taxpayer Identification Number (TIN).

☐ TIN: _____.

☐ TIN has been applied for.

☐ TIN is not required because:

☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

☐ Offeror is an agency or instrumentality of a foreign government;

☐ Offeror is an agency or instrumentality of the Federal Government.

(4) Type of organization.

☐ Sole proprietorship;

☐ Partnership;

☐ Corporate entity (not tax-exempt);

☐ Corporate entity (tax-exempt);

☐ Government entity (Federal, State, or local);

☐ Foreign government;

☐ International organization per 26 CFR 1.6049-4;

☐ Other _____.

(5) Common parent.

☐ Offeror is not owned or controlled by a common parent;

☐ Name and TIN of common parent:

Name _____.

TIN _____.

(m) Restricted business operations in Sudan. By submission of its offer, the offeror certifies that the offeror does not conduct any restricted business operations in Sudan.

(n) Prohibition on Contracting with Inverted Domestic Corporations- (1) Relation to Internal Revenue Code. An inverted domestic corporation as herein defined does not meet the definition of an inverted domestic corporation as defined by the Internal Revenue Code 25 U.S.C. 7874.

(2) Representation. By submission of its offer, the offeror represents that-

(i) It is not an inverted domestic corporation; and

(ii) It is not a subsidiary of an inverted domestic corporation.

(o) Prohibition on contracting with entities engaging in certain activities or transactions relating to Iran. (1) The offeror shall email questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(2) Representation and certifications. Unless a waiver is granted or an exception applies as provided in paragraph (o)(3) of this provision, by submission of its offer, the offeror-

(i) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(ii) Certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act; and

(iii) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds \$3,000 with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at <http://www.treasury.gov/ofac/downloads/t11sdn.pdf>).

(3) The representation and certification requirements of paragraph (o)(2) of this provision do not apply if-

(i) This solicitation includes a trade agreements certification (e.g., 52.212-3(g) or a comparable agency provision); and

(ii) The offeror has certified that all the offered products to be supplied are designated country end products.

(End of provision)

OTHER CONTRACT PRICING

FOR

NASA-WIDE CONTRACT FOR HELIUM

Grace period is in accordance with the unit selected (e.g., price per day or hour); Bidder shall insert the applicable number in the Grace Period column. Bidder shall place an "X" in the column that represents the applicable grace period.

[illegible]

PAGE 2 of 9

[illegible]

PAGE 3 of 9

MAINTENANCE

Bidder shall identify and price any maintenance and leasing charges they may wish to include in the contract. Examples include: 30 day lease of bulk gas tube trailer; hydrostatic testing of cylinders; valve replacement; and painting. Bidders shall ensure that proposed prices are either in accordance with a commercial published price list or that prices are equal to or better than those offered to their most favored customer.

INABILITY TO ACCEPT DELIVERY

[illegible]

(End of text)

[illegible]

PAGE 6 of 9

UNFORECASTED REQUIREMENTS

Description (Not Location Specific)	Unit	Contract Year (Insert Price Per Unit)				
		2015	2016	2017	2018	2019
Dewar Liquid Helium	Liter					
Bulk Liquid Helium	Liter					
Cylinder Gaseous Helium – Grade A	SCF					
Cylinder Gaseous Helium – Grade B	SCF					
Cylinder Gaseous Helium – High Purity (99.999%)	SCF					
Cylinder Gaseous Helium – Ultra High Purity (99.9995%)	SCF					
Cylinder Gaseous Helium – Ultra High Purity (99.9997%)	SCF					
Bulk Gaseous Helium – Grade A	SCF					
Bulk Gaseous Helium – Grade B	SCF					
Transportation of Dewar Liquid Helium	Mile					
Transportation of Bulk Liquid Helium	Mile					
Transportation of Cylinder Gaseous Helium	Mile					
Transportation of Bulk Gaseous Helium	Mile					

RESIDUAL CREDIT

Description	Unit	Contract Year (Insert Price Per Unit)				
		2015	2016	2017	2018	2019
Residual Credit – Bulk Gaseous Helium	SCF					
Residual Credit – Bulk Liquid Helium	Liter					

EMERGENCY DELIVERY

Description	Unit	Contract Year (Insert Price Per Unit)				
		2015	2016	2017	2018	2019
Emergency Delivery (less than 48-hour notice)	Price/Occurrence					

[illegible]

PAGE 9 of 9

CAPABILITY FORM

FOR

NASA-WIDE CONTRACT FOR HELIUM

CAPABILITY FORM NASA-WIDE ACQUISITION OF HELIUM		1. DATE	2. CONTRACT LINE ITEM NUMBER	3. PAGE 1 OF
4. CONTRACTOR/OFFEROR NAME		5. SOLICITATION NUMBER	6. CONTRACT NUMBER	
7. CONTRACTOR/OFFEROR ADDRESS		8. CONTRACTOR/OFFEROR PRIMARY CONTACT (Name, Email, Phone, Fax)*		
		9. CONTRACTOR/OFFEROR ALTERNATE CONTACT (Name, Email, Phone, Fax)		
10. PRIMARY PRODUCTION FACILITY		11. PRIMARY TRANSFILL FACILITY		
A. ADDRESS		A. ADDRESS		
B. PROPELLANT HELIUM	C. MAXIMUM FIXED STORAGE	B. PROPELLANT HELIUM	C. MAXIMUM FIXED STORAGE	
D. MAXIMUM DAILY PRODUCTION	E. MAXIMUM MONTHLY PRODUCTION	D. MAXIMUM DAILY PRODUCTION	E. MAXIMUM MONTHLY PRODUCTION	
F. PRODUCTION FACILITY CONTACT		F. TRANSFILL FACILITY CONTACT		
12. DISTRIBUTION INFORMATION				
A. NUMBER OF TRUCKS/TANKERS/TRAILERS	B. AVERAGE TRUCK/TANKER/TRAILER CAPACITY		C. AVERAGE NUMBER OF DRIVERS	

Note 1: The contractor will furnish one point of contact, and an alternate if the contractor so desires, to receive placement of delivery orders by the Government (refer to Block 8).

Note 2: The contractor shall identify the primary production facility and/or primary transfill facility that will produce and/or deliver helium to meet contract line item number requirements. The final distribution facility will be the shipping point used to determine any charges accrued due to the Government's inability to accept deliveries. The contractor may also identify any alternate facilities that could be used in performance of this contract by completing a separate form (please identify the location as "alternate" in Block 10A and/or 11A.). In addition, the final distribution facility point of contact(s) will also be used to place request for shipments against Government authorized delivery orders (refer to Block 11F or Block 10F as appropriate).

STATEMENT OF WORK

FOR

NASA-WIDE CONTRACT FOR HELIUM

AMES RESEARCH CENTER (ARC)

- (a) Delivery Address
 - Ames Research Center
 - Receiving Section, Bldg N255
 - Moffett Field, CA 94035-1000
 - (b) Delivery Hours
 - (1) Routine delivery hours: 7:30 a.m. to 3:00 p.m. (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week
 - (c) Routine Requirements:
 - (1) Liquid: 100 liters per month
 - (2) Gas: 1,100 scf per month. Gas cylinders may be ordered on quarterly (vs monthly) basis
 - (d) Peak Requirements:
 - (1) Liquid: 400 liters per month (approximately twice per year). Weekly deliveries of 100 liters per week anticipated during peak months, with the highest projected weekly order of 200 liters.
 - (2) Gas: 1,600 scf per month (anticipated three times per year). If gas cylinders are ordered on a quarterly basis, estimated peak qty of 3,800 scf per quarter.
 - (e) Special Delivery Equipment Requirements: Contractor to provide all dewars (100 liter dewars). 200-220 scf cylinders are utilized at ARC (see Government furnished equipment).
 - (f) Government Furnished Equipment: There are approximately 50 Government-owned gaseous helium cylinders available for use at this delivery location.
 - (g) Special Delivery Conditions: The contractor shall deliver within 48 hours of receiving a request for shipment. Gas may be ordered on a quarterly (vs monthly) basis. Requests for shipment called in by 11:00 a.m. (local time) shall be delivered by 11:00 a.m. (local time) of the second working day following the request for shipment. Requests for shipment called in after 11:00 a.m. (local time) shall be delivered by 11:00 a.m. (local time) of the third working day after.
 - (h) Special Access Requirements (i.e., security): Delivery Vehicles may be subject to search prior to entry at ARC. All drivers required to be U.S. citizens. The contractor is required to show delivery paperwork to access the Center.
 - (i) Geographic Location: ARC is located on the border of the cities of Mountain View and Sunnyvale in northern California, at the southern end of San Francisco Bay. ARC occupies about 430 acres of land, and serves as host to a number of other Federal, Civilian, and Military resident agencies on the adjoining 1,500-acre former Naval Air Station, now known as Moffett Federal Airfield.
 - (j) Delivery Driver Directions: From Highway 101, exit onto Moffett Boulevard. Proceed toward ARC Main Gate. After showing delivery paperwork to gate guard, obtain directions from guard to Bldg N255, Receiving Section (at the corner of De France and Allen Road). Directions from gate guard required because of changing routes on ARC due to ongoing road construction.
- (End of text)

COLUMBIA SCIENTIFICA BALLOON FACILITY (CSBF), PORT HUENEME CA**(ANTARCTIC SUPPORT)**

- (a) Delivery hours:
 - (1) Routine delivery hours: 7:30 am - 4:00 pm (local time) Monday through Friday.
 - (2) Emergency delivery hours: Not applicable.
- (b) Delivery address and contact:
 - (1) GHe (ISO containers)
 - (i) Address: Bldg 471 North End NBVC, Port Hueneme CA 93043
 - (ii) Contact: Jackie Samuel (805-985-6851)
 - (2) LHe Dewars (500 liter)
 - (i) Address: Manager Terminal Operations; National Science Foundation; c/o PAE, New Zealand Limited; Gate 1, Orchard Road North; Christchurch International Airport; Christchurch, New Zealand
 - (ii) Contact : David Sullivan (64-3-358-8139)
- (c) Geographic locations: The Port of Hueneme is located in Port Hueneme CA, between Los Angeles and Santa Barbara, approximately 65 miles northwest of Los Angeles CA. Christchurch International Airport is located on the South Island (Te Waipounamu) of New Zealand approximately 12 kilometers northwest of the Christchurch city center.
- (d) Routine requirements:
 - (1) Bulk Gas: 800,000 per shipment to occur once per year for contract year 1. Requirement increases to 1,120,000 scf per shipment to occur once per year for contract years 2-5
 - (2) Dewar Liquid: 5,000 liters per month anticipated three times per year. Normally required in the November-January timeframe each year. 500 liter dewars required
- (e) Peak requirements:
 - (1) Bulk Gas: 1,120,000 scf per shipment, anticipated to occur once per contract period in contract year 1 (if required). Years 2-5 have Peak requirement matching Routine due to limitations of facility and flight capabilities.
 - (2) Dewar Liquid: 7,500 liters per month up to five times per year. Normally required in the November-January timeframe each year. 500 liter dewars required
- (f) Special delivery equipment requirements:
 - (1) ISO containers are required due to the unique transportation and operational requirements in Antarctica. Bulk gaseous helium trailers are NOT acceptable.
 - (i) ISO-Containers will be approximately 40'Lx8'Wx8'H. The ISO Containers must be capable of being lifted by a crane and standard rigging. ISO Containers of 9 to 13 tubes are acceptable with a lesser number of larger capacity tubes preferred if available. Smaller containers (i.e., 20' ISO containers) which together provide an equivalent amount of gas of the larger required ISO Containers are not acceptable due to limitations of equipment and hardware required to transport the containers during launch operations.
 - (ii) Total water volume of each ISO-container will be approximately 880scf.

- (iii) Each container will contain a minimum capacity of 140,000 cubic feet of helium.
- (iv) Minimum fill pressure will be 2,640 psig at 70 degrees F.
- (v) Minimum discharge rate to atmosphere will be 150,000 scf per hour (as long as module pressure is above 1,500 psig).
- (vi) ISO-Container plumbing specifications:
 - (A) ISO-Containers will be equipped with two outlets and valves terminating with a $\frac{3}{4}$ inch NPT male pipe thread or terminate with two male CGA 1540 fittings. These outlets will be capped off with a $\frac{3}{4}$ inch female cap. Outlet valves to have a flow coefficient (Cv) of 3.1 or higher.
 - (B) Header will be equipped with one outlet for gauging pressure, terminating a CGA 580 female fitting.
 - (C) Working pressure for all headers, outlet piping, and fittings will be 3,000 psi (for 2800 psi fill pressure) or greater.
 - (D) ISO-Container plumbing will not have check valves or other components that restrict gas flow or impede ISO-Container recharging (by CSBF personnel if required).
 - (E) All valves will be pressure and leak tested. All valves will be tested prior to fill to assure seats are in good working order.
 - (F) A tube diagram will be provided to CSBF prior to shipment (normally during pre-shipment coordination). A report on the pressure in each ISO-Container tube will be supplied to CSBF prior to shipment. The water volumes of each ISO-Container tube will be provided to CSBF prior to shipment.
- (2) If the Contractor is required to lease ISO containers specifically to support this location, the rental charges will be for the entire term of the contract (base period plus any exercised options) as identified in the Schedule. If an ISO container is retained by the location past the end of the contract period (awaiting shipment back to Port Hueneme), the rental rate will be calculated with a yearly rate increase of the same percentage as for the last year of the contract. If a tube is required to be removed from an ISO container to comply with DOT weight restrictions, the cost to perform this operation will be charged as designated in the Schedule. The removed tube will not be required to be reinstalled on the ISO container for the remainder of the contract. This fee will be assessed on an as needed basis and should include the effort to reinstall the tube at the conclusion of the contract.
- (3) Dewar Requirements (500 liters):
 - (i) Dewar must have fitted a Military Specification TEVAC brand flow through Absolute Pressure Relief valve (APRV) for off board aircraft venting between Christchurch and Antarctica.
 - (ii) A $\frac{1}{4}$ " MIP to $\frac{1}{4}$ " gas flare fitting and a $\frac{1}{4}$ " to 5/16" gas flare fitting for off board venting to be supplied with dewar.
 - (iii) All other top fittings are standard.
 - (iv) A rolling footprint size of 40"x40", this is required due to the reduced space in the payload buildings in Antarctica.

- (v) Sturdy wood or steel pallet to strap the dewar down to and to make it easier to handle by forklift during transit. Maximum pallet size allowed is 48" x 48" however a pallet size of 44"x44" is desirable if available. Pallets must have forklift pockets.
- (g) Special access requirements: Drivers required to be U.S. Citizens
- (h) Government furnished equipment: None.
- (i) Special delivery conditions:
 - (1) A shipment of gaseous helium in ISO containers to Antarctica is required annually to support NASA's Long Duration Balloon Program. The amount of helium required can vary between 800,000 and 1,120,000 standard cubic feet (5 to 7 ISO containers at 160,000 scf each) depending on the planned flight program and other factors such as balloon launch aborts and unexpected loss of gas while containers are stored in Antarctica. See "Special Delivery Equipment Requirements" for ISO container requirements. The shipments are sent via ocean transit using a ship commissioned by the National Science Foundation (NSF). There is only one ship per year. All ocean shipments originate from the Port of Hueneme, located at Port Hueneme California. Depending on loading schedule, the trailers the ISO containers are delivered on to Port Hueneme may be offloaded upon delivery or retained for up to 3 weeks. The vessel departs in early December, arrives at McMurdo Station in mid-January, and returns to Port Hueneme in March. This round trip ocean transit occurs only once per year. Helium ISO containers must be delivered to the Port of Hueneme no later than mid-November each year. CSBF typically initiates a purchase order for the desired number of ISO-Containers no later than August of each year to allow for adequate coordination prior to shipment. In a nominal year, CSBF typically orders 5-7 ISO-Containers (800,000 – 1,120,000 scf gaseous helium). The first yearly shipment under the contract is anticipated to require a "Routine" requirement of 800,000 scf of gaseous helium (5 ISO Containers).
 - (2) NASA/CSBF launches balloons from McMurdo Station starting in December. The helium shipped via sea from Port Hueneme in December is intended for use one year later. At the conclusion of the launch period (approximately the end of December or in January) any empty containers are delivered to the port at McMurdo Station for return shipment to Port Hueneme. An ISO container shipped in December from Port Hueneme will not be returned to the United States for approximately 15 months. Based on current operational plans, CSBF typically requires 7 ISO-Containers on site in Antarctica during the October-December period. Therefore, due to shipping logistics, the contractor may be required to have as many as 12 ISO-Containers dedicated for NASA use: 5 in shipment (between December and March) and 7 on site in McMurdo Station, Antarctica supporting the launches.
 - (3) Dewars (500 liters) are required to be shipped by the Contractor by air to New Zealand (Christchurch International Airport), where the NSF will complete dewar transport from New Zealand to Antarctica. Air shipments will allow maximum use of liquid product and avoids excessive boiloff resulting from longer sea journey originating CONUS. Up to 10 dewars at a time could be retained in Antarctica for up to three months.

(End of text)

COLUMBIA SCIENTIFIC BALLOON FACILITY (CSBF), PALESTINE, TX

- (a) Delivery Address
 - Columbia Scientific Balloon Facility
 - Palestine, TX 75802
- (b) Delivery Hours
 - (1) Routine delivery hours: 7:30 am - 4:30 pm (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 Hours a day, 7 days a week
- (c) Routine Requirements:
 - (1) Bulk gas: 310,000 scf per month to occur 1 time per year. Note: Bulk gas trailers are typically requested in the April time frame and are utilized through the end of August to support balloon launches.
 - (2) Dewar liquid: 2,500 liters per month, to occur 3 times per year. 500 liter dewars.
- (d) Peak Requirements:
 - (1) Bulk gas: 620,000 scf per month may occur up to 2 additional times per year (dependent on future changes on flight operations schedule). Note: Bulk gas trailers are typically requested in the April time frame and are utilized through the end of August to support balloon launches. Largest anticipated weekly requirement of 310,000 scf.
 - (2) Dewar liquid: 4,000 liters per month to occur up to 3 times per year. 500 liter dewars.
- (e) Special Delivery Equipment Requirements:
 - (1) Preference is for bulk gas trailers with ten (10) to thirteen (13) tubes. The tubes will be rated at 2,800 psig or greater and containing at least 160,000 scf with a minimum discharge rate to atmosphere of 150,000 cubic feet per hour (as long as module pressure is above 1,500 psig). The bulk gas trailers are dropped at site and returned when empty or at the end of the project. Trailers will be equipped with a header connecting all tubes together. Each tube will have a cutoff valve with handle. The header will be equipped with two discharge connections. Each discharge connection will include a Western Valve 1800E or Superior 430C Master Shut Off Valve with a minimum flow coefficient (Cv) of 3.05 or greater. Both discharge connections will terminate with a CGA 1540 connection. The header will be equipped with one outlet for gauging pressure, terminating in a CGA 580 female fitting. Working pressure for all headers, outlet piping, and fittings will be 3,000 lbs or greater. The trailers plumbing will have no check valves or other components that restrict gas flow or impede recharging by CSBF (if required). All valves will be pressure and leak tested prior to fill to assure seats are in good working order. Each trailer will be placarded with current information on the water volume of the trailer, and CSBF will be furnished with a report showing the pressure in each tube. In the absence of this plate/placard information, the information will be available from the contractor upon request.
 - (2) Bulk gas trailer rental to be determined on a per day basis. If a trailer is retained by the location past the end of the contract period, the rental rate will be calculated with a yearly rate increase of the same percentage as for the last year of the contract.
- (f) Special Access Requirements: Drivers required to be U.S. Citizens
 - (1) Government-Furnished Equipment: (Note: Equipment shown below will be utilized at both the Palestine TX and Ft Sumner NM CSBF locations):

500 liter dewars: 22

- (g) Geographic Location: Palestine is located in east Texas between Dallas and Houston. Approximately 100 miles southeast of Dallas, TX.
 - (h) Delivery driver directions: From Dallas, take I-45 to Corsicana exit., follow U.S. 287 to FM 3224, turn right, approximately 1.5 miles on left
- (End of text)

COLUMBIA SCIENTIFIC BALLOON FACILITY (CSBF), FT. SUMNER, NEW MEXICO

- (a) Delivery Address
 - Columbia Scientific Balloon Facility
 - Ft. Sumner, NM
- (b) Delivery Hours
 - (1) Routine delivery hours: 7:30 am to 4:30 pm (local time)
 - (2) Emergency delivery hours: 24 hours a day, 7 days a week
- (c) Routine Requirements:
 - (1) Bulk gas: 930,000 scf per month to occur 4 times per year. Note: Bulk gas trailers are typically requested for deliveries to support operations in July, August, September and October each year and may be utilized through the end of November to support balloon launches.
 - (2) Dewar liquid: 2,500 liters per month to occur 4 times per year
- (d) Peak Requirements:
 - (1) Bulk gas: 1,600,000 scf per month to occur 1 time per year. Increase from routine requirement due to potential support of additional operations in September each year (note: may occur as early as mid-August and as late as mid-October). Maximum weekly delivery amount of 930,000 scf, which could occur during the peak operations period anticipated in September (note: may occur as early as mid-August and as late as mid-October).
 - (2) Dewar liquid: 4,000 liters per month, to occur up to 4 time per year. 500 liter dewars.
- (e) Special Delivery Equipment Requirements
 - (1) Preference is for bulk gas trailers with ten (10) to thirteen (13) tubes. The tubes will be rated at 2,800 psig or greater and containing at least 160,000 scf with a minimum discharge rate to atmosphere of 150,000 cubic feet per hour (as long as module pressure is above 1,500 psig). The bulk gas trailers are dropped at site and returned when empty or at the end of the project. Trailers will be equipped with a header connecting all tubes together. Each tube will have a cutoff valve with handle. The header will be equipped with two discharge connections. Each discharge connection will include a Western Valve 1800E or Superior 430C Master Shut Off Valve with a minimum flow coefficient (Cv) of 3.05 or greater. Both discharge connections will terminate with a CGA 1540 connection. The header will be equipped with one outlet for gauging pressure, terminating in a CGA 580 female fitting. Working pressure for all headers, outlet piping, and fittings will be 3,000 lbs or greater. The trailers plumbing will have no check valves or other components that restrict gas flow or impede recharging by CSBF (if required). All valves will be pressure and leak tested prior to fill to assure seats are in good working order. Each trailer will be placarded with current information on the water volume of the trailer, and CSBF will be furnished with a report showing the pressure in each tube. In the absence of this plate/placard information, the information will be available from the contractor upon request.
 - (2) Bulk gas trailer rental to be determined on a per day basis. If a trailer is retained by the location past the end of the contract period, the rental rate will be calculated with a yearly rate increase of the same percentage as for the last year of the contract.

- (3) Normal order notification for deliveries to Ft Sumner New Mexico is two (2) weeks. Occasional order notification of one (1) week may be required for deliveries to Ft Sumner New Mexico with prior coordination and agreement with supplier.
 - (f) Special Access Requirements: Drivers required to be U.S. Citizens
 - (g) Government-Furnished Equipment: (Note: Equipment shown below will be utilized at both the Palestine TX and Ft Sumner NM CSBF locations)
 - 500 liter dewars: 22
 - (h) Special Delivery Conditions: Operational requirements may require up to six trailers on site at once if replenishments (two trailers at a time) cannot be accomplished within a 48 hour turnaround time. Acceptable alternative is for four trailers on site initially with capability to replenish two trailers at a time within 48 hours.
 - (i) Geographic Location: Ft. Sumner is located in east central New Mexico, approximately 60 miles west of Clovis, NM.
 - (j) Delivery Driver Directions: Delivery site is located at the Ft. Sumner Municipal Airport.
- (End of text)

GLENN RESEARCH CENTER (GRC)

- (a) Delivery Address
 - Glenn Research Center
 - 21000 Brookpark Rd
 - Cleveland, OH 44135
- (b) Delivery Hours
 - (1) Routine delivery hours: 8:00a.m.- 4:00 p.m. (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week.
- (c) Routine Requirements:
 - (1) Grade A GHe:
 - (i) For Contract years 1-2: 40,000 scf bulk gas per month, estimated once per year.
 - (ii) For Contract years 3-5: 60,000 scf bulk gas per month, estimated once per year.
 - (2) Grade N helium:
 - (i) 18,000 scf bulk gas per month, estimated twice per year.
- (d) Peak Requirements:
 - (1) Grade A GHe
 - (i) For Contract years 1-2: 60,000 scf bulk gas per month, estimated up to twice per year.
 - (ii) For Contract year 3-5: 80,000 scf bulk gas per month, estimated up to twice per year.
 - (iii) Note: Additional peak requirements may occur if additional testing occurs at location and quantity would be in place of Routine Requirements. BEQ only shows qtys for Routine Requirements due to uncertainty of Peak Requirement occurrence.
 - (2) Grade N GHe:
 - (i) 30,000 scf bulk gas per month, estimated once per year. This requirement anticipated to occur once after GRC storage vessel recertification (currently scheduled to occur during contract year 1)
- (e) Special Delivery Equipment Requirements: N/A
- (f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.
- (g) Government-Furnished Equipment: Tube trailers will be used in execution of the option of the Government for the drop off/pick up of Government trailers at the transfill (see Special Delivery Conditions). Listed equipment is utilized at both the GRC Cleveland site as well as the Plumbrook site:
 - (1) Tube Trailer #4: 75,050 scf capacity @ 2400 psi
 - (2) Tube Trailer #20: 75,050 scf capacity @ 2400 psi
 - (3) Tube Trailer #54: 55,872 scf capacity @ 2400 psiThe Government reserves the right to add/discontinue GFE trailers from the list of available GFE.

(h) Special Delivery Conditions

(1) Grade A Helium:

- (i) Contractor shall transport product in vendor owned trailers (up to 180,000 scf capacity if requested by the Government) to fill on site storage (including Govt tube trailers) of gaseous helium at the Government location, or fill Government owned gaseous helium trailers that are delivered by the Government to the contractors fill location. Contractor deliveries to location utilizing contractor owned trailers within 48 hours of ordering.
- (ii) For filling of GHe storage at GRC: Typical pressure at the time of fill is 300 psig. Maximum allowable pressure of receiver vessel at the end of delivery is 2400-2600 psig.
 - (A) Delivery within 24 hours upon receipt of order, Monday through Thursday is required. The "short notice emergency delivery charge" will apply for these 24 hour deliveries.
 - (B) For orders placed on Friday, a Monday delivery is required. The "short notice emergency delivery charge" will not apply.
- (iii) The Government may transport and drop off empty Government owned trailers to the contractor's facility upon notification and acceptance of the Government's requirement by the contractor. The contractor will be given a 2-day notice by the Government prior to the Government's delivery of the Government-owned gaseous trailers to the transfill station. The "short notice emergency delivery charge" will not apply due to over 24 hour notice. The contractor shall fill trailers within 24 hours of drop off. The Government will pick up the Government-owned trailers and transport them to the delivery point. Exercising the option to drop off/pick up Government trailers at the transfill will be solely up to the Government at the time the product is ordered. A 40 mile one way distance from GRC (Cleveland) to the transfill will be considered the maximum reasonable distance for the Government to exercise this option of the drop off/pick up Government trailers at the transfill.

(2) Grade N Helium:

- (i) Contractor shall transport product in vendor owned trailers to fill on site storage
- (ii) For filling of GHe storage at GRC: Typical pressure at the time of fill is 20 psig. Maximum allowable pressure of receiver vessel at the end of delivery is 80 psig. ¼" A&N fittings on storage vessel. Capacity of storage vessel is approximately 24,000 scf at 80 psig.
 - (A) Delivery within 24 hours upon receipt of order, Monday through Thursday is required. The "short notice emergency delivery charge" will apply for these 24 hour deliveries.
 - (B) For orders placed on Friday, a Monday delivery is required. The "short notice emergency delivery charge" will not apply due to over 24 hour notice.
- (i) Geographic Location: GRC is located at 21000 Brookpark Road, some 20 miles southwest of the city of Cleveland. Situated on 350 acres of land adjacent to Cleveland Hopkins International Airport, GRC comprises more than 140 buildings that include 24 major facilities and over 500 specialized research and test facilities.
- (j) Delivery Driver Directions: From I-480 West, exit at Grayton Ave. Head south on Grayton Road. Turn right (west) onto Brookpark Road for ½ mile to main gate of GRC

(End of text)

GRC PLUMBROOK STATION (GRC-PB), SANDUSKY OH**(k) Delivery Address**

GRC Plumbrook Station
6100 Columbus Avenue
Sandusky, OH 44870

(l) Delivery Hours

- (1) Routine delivery hours: 7:30 a.m.- 3:30 p.m.(local time) Monday through Friday
- (2) Emergency delivery hours: 24 hours per day, 7 days per week.

(m) Routine Requirements: 225,000 scf per month. Typical pressure of receiver vessel at the time of fill is 300 psig. Maximum allowable pressure of receiver vessel at the end of delivery is 2400-2600 psig. Delivery within 48 hours of receipt of order, Monday through Thursday is required. For orders placed on Friday, a Monday delivery is required.**(n) Peak Requirements: 375,000 scf per month. Peak requirement anticipated to occur once per year in Contract year 1 and up to twice a year in contract year 2-5.****(o) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.****(p) Government-Furnished Equipment: Tube trailers will be used in execution of the option of the Government for the drop off/pick up of Government trailers at the transfill (see Special Delivery Conditions). Listed equipment is utilized at both the GRC Cleveland site as well as the Plumbrook site:**

- (1) Tube Trailer #4: 75,050 scf capacity @ 2400 psi
- (2) Tube Trailer #20: 75,050 scf capacity @ 2400 psi
- (3) Tube Trailer #54: 55,872 scf capacity @ 2400 psi

The Government reserves the right to add/discontinue GFE trailers from the list of available GFE.

(q) Special Delivery Conditions

- (1) Contractor shall transport product in vendor owned trailers (up to 180,000 scf capacity if requested by the Government) to fill tube trailers of gaseous helium at the Government location, or fill Government owned gaseous helium trailers that are delivered by the Government to the contractors fill location. Contractor deliveries to location utilizing contractor owned trailers within 48 hours of ordering.
- (2) The Government may transport and drop off empty Government owned trailers to the contractor's facility upon notification and acceptance of the Government's requirement by the contractor. The contractor will be given a 2-day notice by the Government prior to the Government's delivery of the Government-owned gaseous trailers to the transfill station. The "short notice emergency delivery charge" will not apply due to over 24 hour notice. The contractor shall fill trailers within 24 hours of drop off. The Government will pick up the Government-owned trailers and transport them to the delivery point. Exercising the option to drop off/pick up Government trailers at the transfill will be solely up to the Government at the time the product is ordered. A 40 mile one way distance from GRC (Cleveland) to the

transfill will be considered the maximum reasonable distance for the Government to exercise this option of the drop off/pick up Government trailers at the transfill.

- (3) The Government may request the delivery and detention of vendor owned trailers (up to 180,000 scf capacity) at GRC-Plumbrook when GFE trailer assets are inadequate to support GRC-Plumbrook requirements. A minimum of 30 days lead time to the vendor will be required to coordinate and facilitate delivery of vendor owned trailers to be detained at GRC-Plumbrook. Detention times of between 2-4 weeks may occur up to twice a year.
 - (r) Geographic Location: GRC-Plum Brook Station, (6400-acres) is located about 3 miles south of Sandusky, Ohio and some 50 miles west of Cleveland.
 - (s) Delivery Driver Directions: From Cleveland, take I-80 (Ohio Turnpike) to US-250 North to CR-112. Travel southwest on CR-112 to NASA Plumbrook Station
- (End of text)

GODDARD SPACE FLIGHT CENTER (GSFC)**(a) Delivery Address**

Goddard Space Flight Center
Mail Code 279.0
Greenbelt, MD 20771

(b) Delivery Hours

- (1) Routine delivery hours: 7:30 a.m.- 3:00 p.m.(local time) Monday through Friday
- (2) Emergency delivery hours: 24 hours per day, 7 days per week.

(c) Routine Requirements:**(1) GHe:**

- (i) Grade B cylinders: 8,500 scf per month
- (ii) UHP cylinders:
 - (A) 99.999 % purity/213 scf cylinders: 3 cylinders per month
 - (B) 99.999 % purity/300 scf cylinders: 4 cylinders per month
 - (C) 99.9995 % purity/292 scf cylinders: 1 cylinder per month

(2) LHe: 3,000 liters per month**(d) Peak Requirements:****(1) GHe:**

- (i) Grade B cylinders: 18,000 scf per month (anticipated 2 times a year)
- (ii) UHP cylinders:
 - (A) 99.999 % purity/213 scf cylinders: 6 cylinders per month (anticipated 2 times a year)
 - (B) 99.999 % purity/300 scf cylinders: 6 cylinder per month (anticipated 2 times a year)
 - (C) 99.9995 % purity/292 scf cylinders: 3 cylinder per month (anticipated 2 times a year)

(2) LHe: 9,000 liters per month (anticipated 2 times a year)**(e) Special Delivery Equipment Requirements:**

- (1) GHe: The Contractor must supply all UHP cylinders. See "Government-Furnished Equipment" for Grade B cylinder GFE info. Contractor is required to pick-up all cylinders from Building 87, at GSFC, Greenbelt, MD., refill, and return the cylinders back to Building 87. Building 87 is a cryogenic storage facility that is unoccupied. Cylinder pickup is usually between 7:30 a.m. and 3:00 p.m. (local time). If the contractor requires a different time for pickup, the driver will have to call before each shipment to arrange for pick-up/delivery times. The contractor is required to contact a GSFC cryogenics representative during every pick-up and delivery.
- (2) LHe: Contractor must supply all dewars. Normal dewar size will be 100 liters, but occasionally 60 liter, 250 liter, 350 liter and 500 liter dewars will be used. Dewars must be super insulated and must have a 3/8 inch withdrawal connection.

- (f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. The contractor is required to obtain GSFC badges for a minimum of 2 contractor delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.
- (g) Government-Furnished Equipment: There are a total of 75 gaseous helium cylinders available for the Grade B cylinder requirement only. Government-owned cylinder size is 213 scf and has a CGA 580 valve. The Contractor must supply all dewars and UHP cylinders.
- (h) Special Delivery Conditions
 - (1) GHe:
 - (i) Gas cylinder delivery location: Goddard Space Flight Center, Mail Code 279.0, Building 87, Greenbelt, MD 20771
 - (ii) Turnaround time for cylinders is no later than 2 weeks from date of cylinder pick-up. The driver must check in with Carla Jackson, (301) 286-1459 for delivery instructions. Contractors are required to inspect cylinders for hydrostatic testing, painting and replacement of valves, as needed. All charges for cylinder testing, repairs, etc will be per contract maintenance schedule. Periodic coordination between location and contractor will be used to monitor requirement for cylinder pickups and deliveries. Upon cylinder pickup, the contractor shall annotate the quantity of cylinders on the contractor pickup form and provide a copy to GSFC (Carla Jackson or her authorized representative) for their records before leaving GSFC.
 - (2) LHe:
 - (i) Dewar liquid delivery location: Goddard Space Flight Center, Mail Code 279.0, Building 7, Greenbelt, MD 20771
 - (ii) Contractor is required to pick-up and deliver dewars twice per week, normally on Tuesdays and Thursdays. The driver must check in with Carla Jackson, (301) 286-1459 for delivery instructions.
 - (iii) Upon completion of deliveries the driver must annotate the dewar quantity delivered (in liters), serial number, and sign the delivery ticket. The driver will also annotate on the delivery ticket the serial numbers of any empty dewars picked up. The driver shall provide 1 copy of all paperwork to Carla Jackson (or her authorized representative) before leaving GSFC.
 - (iv) Delivery of dewars to be within 72 hours after order is placed. Normal GSFC Dewar deliveries to be on Tuesdays and Thursdays unless otherwise coordinated with the location. Orders for Tuesday deliveries will be placed the previous Friday.
 - (v) When an empty dewar is ready for pickup, the location POC will contact the contractor by phone. The demurrage charges for the empty dewar will end on the day the contractor is notified by the location POC. The location POC will document the phone call with an e-mail to the contractor.
- (i) Geographic Location: GSFC is located in Maryland, northeast of Washington, DC.
- (j) Delivery Driver Directions
 - (1) From Washington, DC: Take the Capital Beltway (I95/I495) to Exit 22A Greenbelt Road (Rt 193). Go east on Greenbelt Road for approximately 2 miles. The GSFC main entrance will be on the left. Go past the main entrance to the second traffic light at Good Luck Road. Make a left turn followed by another left turn at sign marked "GSFC Central Receiving, All Deliveries". Drivers will be given a pass to enter the facility.

- (2) From Baltimore: Take 95 South to I495 East. From I495 take Exit 22A Greenbelt Road (Rt 193). Go east on Greenbelt Road for approximately 2 miles. The GSFC main entrance will be on the left. Go past the main entrance to the second traffic light at Good Luck Road. Make a left turn followed by another left turn at sign marked "GSFC Central Receiving, All Deliveries". Drivers will be given a pass to enter the facility.

(End of text)

WALLOPS FLIGHT FACILITY (WFF)

- (a) Delivery Address
 - GSFC Wallops Flight Facility
 - Building B-30
 - Wallops Island, VA 23337
- (b) Delivery Hours
 - (1) Routine delivery hours: 8:00 a.m. - 3:30 p.m.(local time) Monday through Friday
 - (2) Emergency delivery hours: N/A
- (c) Routine Requirements: 426 scf per month, approximately 8 times per year
- (d) Peak Requirements: 852 scf per month, approximately once per year
- (e) Special Delivery Equipment Requirements: Delivery truck needs to have a lift gate so that cylinders can be rolled upright from truck to cylinder locker.
- (f) Government-Furnished Equipment: A total of 60 Government-owned helium cylinders are available for use at this location. Cylinder size is 213 scf.
- (g) Special Delivery Conditions: Delivery shall be within seven days after order is placed. Turnaround time for cylinders is no later than one week from date of cylinder pick-up. Contractor is required to inspect cylinders for hydrostatic testing, painting and replacement of valves, as needed. All charges for cylinder testing, repairs, etc will be per contract maintenance schedule. Periodic coordination between location and contractor will monitor requirement for cylinder pickups and deliveries. Upon cylinder pickup, the contractor shall annotate the quantity of cylinders on the contractor pickup form and provide a copy to GSFC WFF for their records.
- (h) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.
- (i) Geographic Location: WFF is located Approximately 45 miles south of Salisbury, Maryland on the Delmarva Peninsula.
- (j) Delivery Driver Directions
 - (1) Deliveries shall be made direct to NASA, GSFC WFF. Proceed from Salisbury, MD, south on Route 13 for approximately 40 miles. At Oak Hall, VA, proceed left onto Route 175 East. Follow signs to WFF (approximately 5 miles off route 13). After proceeding from Main Gate Entrance, take first left onto Wormhoudt Street. Stop at the loading dock of the third building on your right (Building F-19 Receiving). Receiving personnel will then have you follow them to Building B-30 (Hazmat Warehouse) which is less than 1 mile from the Building F-19 loading dock.
 - (2) From the Norfolk, VA area proceed north on Northampton Blvd.(Route 13) across the Chesapeake Bay Bridge and Tunnel System to Oak Hall, VA (approximately 80 miles). At Oak Hall, VA, take a right onto route 175 East. Follow signs to WFF (approximately 5 miles off route 13). After proceeding from Main Gate Entrance, take first left onto Wormhoudt Street. Stop at the loading dock of the third building on your right (Building F-19 Receiving). Receiving personnel will then have you follow them to Building B-30 (Hazmat Warehouse) which is less than 1 mile from the Building F-19 loading dock.

(End of text)

JET PROPULSION LABORATORY (JPL)

- (a) Delivery Address
 - Jet Propulsion Laboratory
 - Building 338-100
 - Mail Code 338-100
 - 4800 Oak Grove Drive
 - Pasadena, CA 91109
- (b) Delivery Hours
 - (1) Routine delivery hours: 8:00 a.m.- 3:00 p.m.(local time) Monday through Thursday
 - (2) See "Special Delivery Conditions" for additional JPL specific info
- (c) Routine Requirements
 - (1) Dewar liquid: 1,660 liters per month
 - (2) Bulk Gas: Delivery of a vendor GHe trailer is anticipated to occur once over the entire contract period (anticipated in contract year 2018, but may occur on any other year of the contract). Estimated quantity of requirement is 40,000 scf at 2250 psig min.
- (d) Peak Requirements: 3,000 liters of Dewar liquid per month, anticipated once per year
- (e) Special Delivery Equipment Requirements:
 - (1) If on site GHe storage (currently scheduled to be installed by 2016 at Blg 233) is available, the vendor supplied GHe trailer will be utilized for up to three days to recharge the new storage tubes. Otherwise the vendor supplied GHe trailer may be retained on site for up to several months, dependent on the supported test requirements.
 - (2) Majority of 60 liter and 100 liter dewars are expected to be provided by JPL (see "Government Furnished Equipment"). Vendor to provide occasional 30 liter, and 250 liter dewar, plus any additional 60 liter and 100 liter dewars required by location. 60 liter dewar requirement specifically requires Cryofab model CSMH-60 dewars. Lift-gate on rear of dewar delivery truck is required for loading/off-loading dewars at time of delivery and pickup.
 - (3) Approximate Yearly Dewar Usage by Size:
 - (i) 30 Liter: 2 dewars per year
 - (ii) 60 Liter: 100 dewars per year
 - (iii) 100 liters: 135 dewars per year
 - (iv) 250 liters: 2 dewar per year
- (f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. All delivery drivers to be pre-approved by JPL Security prior to access. The badging point of contact will ensure the drivers are issued temporary badges for admission onto JPL in accordance with current Personnel Identity Verification (PIV) requirements.
- (g) Government-Furnished Equipment: There are approximately 30 Government owned 60 liter and 12 Government owned 100 liter dewars available for use at this delivery location.
- (h) Special Delivery Conditions
 - (1) JPL will be closed except for time-critical project activities on alternative Fridays. This closure includes commercial shipments to and from JPL. Shipments which cannot be avoided to or

from JPL on Friday closures must be scheduled in advance with JPL Shipping (7:30 AM - 4:15 PM PST) and/or Receiving (8:00 AM - 3:30 PM PST) at 818-393-5544 or 818-354-8511. Orders normally will be placed by JPL before noon 2 working days prior to normal delivery days (i.e., Tuesday for Thursday delivery). Morning deliveries (prior to noon) are preferable. Alternate Fridays are not available for normal deliveries. Desired delivery days are Tuesday and Thursday. Vendor invoices should reference container serial numbers.

- (i) Geographic Location: JPL is a federally funded research and development facility managed by the California Institute of Technology for the National Aeronautics and Space Administration. In addition to its work for NASA, JPL conducts tasks for a variety of other federal agencies. JPL's main 72-hectare (177-acre) site is at the foot of the San Gabriel Mountains near Pasadena, California, 19 kilometers (12 miles) northeast of Los Angeles.
- (j) Delivery Driver Directions: Enter JPL via the South Gate. Proceed to parking area in front of Receiving. Notify Receiving Clerk of delivery. Cryogenics personnel will escort truck to Building 338 for off-loading.

(End of text)

JOHNSON SPACE CENTER (JSC)

- (a) Delivery Address
 - Johnson Space Center
 - B421 Receiving Area
 - Houston, TX 77058
- (b) Delivery Hours
 - (1) Routine delivery hours: 7:30 a.m. - 3:30 p.m. (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week.
- (c) Routine Requirements:
 - (1) Ultra high purity cylinder gas: 4500 scf per month
 - (2) Grade A cylinder gas: 500 scf per month
 - (3) Dewar liquid: 200 liters per month (anticipated five times per year)
 - (4) Bulk gas: 50,000 scf per month, anticipated three times a year
- (d) Peak Requirements:
 - (1) Ultra high purity cylinder gas: 5,400 scf per month (anticipated up to 4 times a year)
 - (2) Grade A cylinder gas: 600 scf per month (anticipated 2 times a year)
 - (3) Dewar liquid: 500 liters per month (anticipated one time a year)
 - (4) Bulk gas: 100,000 scf per month (anticipated once per year). This would be anticipated to occur if multiple bulk gas usage locations coordinate single trailer delivery for storage refills.
- (e) Special Delivery Conditions:
 - (1) Turnaround time for cylinders is no later than 3 weeks from date of cylinder pick-up.
 - (2) Dewar delivery shall be within 72 hours after order is placed.
 - (3) Receipt of deliveries not available on alternate Fridays ("Flex Fridays"). If delivery is required on a Friday, location will ensure order placed to ensure delivery date is not a "Flex Friday"
- (f) Special Delivery Equipment Requirements:
 - (1) For bulk gas, the tube trailers listed below (see "Government-Furnished Equipment") may be removed from the delivery site, filled, and returned.
 - (2) On site bulk gas storage is to be filled with cascade by supplier trailers. On site gas storage information:
 - (i) Low pressure gas storage (<250 psi): 60,000 scf capacity
 - (ii) High pressure gas storage (3000 psi): two storage vessels with combined 20,000 scf capacity. This storage is currently being implemented and should be operational during contract year 1.
 - (3) Dewar requirements: Contractor must supply all dewars. Normal dewar size will be 100 liters, but occasionally 200 liter and 500 liter dewars will be used.
 - (4) Contractor required to inspect cylinders for hydrostatic testing, painting & replacement of valves as needed. All charges for cylinder testing, painting, repairs etc will be per contract maintenance schedule.
- (g) Special Access Requirements (i.e., security): Delivery vehicles subject to search prior to entry at JSC. All drivers required to be U.S. citizens. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.

(h) Government-Furnished Equipment:

- (1) Approximately 175 total gaseous helium cylinders are available.
- (2) One tube trailer is currently available for use at this delivery point with the following specifications:
 - (i) 30 tubes on trailer
 - (ii) 5500 psig maximum fill pressure (DOT 5000+ rating)
 - (iii) Capacity: 80,000 SCF at 5000 psig/47,000 SCF at 2900 psig
 - (iv) Note: Trailer included as available GFE trailer for fills to same pressure as provided with "standard pressure" vendor supplied tube trailers fills (up to ~3000 psi). The availability of the 5000 psi trailer does NOT imply a requirement for 5000 psi GHe in this contract.
 - (v) The Government reserves the right to add/discontinue GFE trailers from the list of available GFE.
- (i) Special Delivery Conditions: All deliveries must first go to the receiving area (Blg 420). POC: Brenda Lewis (281-244-0935). Following check-in, deliveries will be directed to their final destination
- (j) Geographic Location: JSC is adjacent to Clear Lake at 2101 NASA Road 1, about 20 miles southeast of downtown Houston via Interstate 45.
- (k) Delivery Driver Directions: From 45 South, exit at Exit 26 (Bay Area Blvd) . Head east on Bay Area Blvd, cross Highway 3 and turn right at Space Center Blvd. The delivery gate veers off to the right before the first light on Space Center at W. Linkage. Drivers will stop at Security gate (Post 12) for inspection, after which they will proceed to the receiving area (Blg 420). They will then be directed to final delivery location.

(End of text)

KENNEDY SPACE CENTER (KSC)

- (a) Delivery Address
 - Propellant North Operations ISC-341
 - Building K7-416
 - Kennedy Space Center, FL 32899
- (b) Delivery Hours
 - (1) Routine delivery hours: 6:00 a.m. - 2:30 p.m. (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week
- (c) Routine Requirements
 - (1) Bulk liquid: 80,000 liters per month. Weekly deliveries of 40,000 liters
 - (2) Dewar Liquid
 - (i) 100 liters per month in 100 liter dewars, approximately 10 times per year
 - (ii) 500 liters per month in 500 liter dewars, approximately 1 time per year
- (d) Peak Requirements
 - (1) Bulk liquid: 400,000 bulk liters in a 7 day period. This requirement is anticipated approximately one time a year normally coinciding with Delta IV Heavy and Space Launch System (SLS) launches. Per current schedules, SLS launch anticipated in FY18 (Contract Year 4) and Delta IV Heavy launches anticipated in FY 15 (Contract Year 1), FY17 (Contract Year 3), and FY19 (Contract Year 5). See "Other Special Considerations" for anticipated launch profiles and usage information.
 - (2) Dewar liquid
 - (i) 200 liters per week in 100 liter dewars, anticipated once per year
 - (ii) 1,000 liters per week in 500 liter dewars, anticipated once per year.
- (e) Special Delivery Equipment Requirements: Only bulk liquid delivery tankers, nominally 40,000 liter capacity for bulk liquid deliveries. Dewar requirements: 100 liter and 500 liter dewars.
- (f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. Entry into KSC is restricted to badged personnel only. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.
- (g) Special Delivery Conditions:
 - (1) Liquid tanker detention at KSC may occur for extended periods (up to 10 days) during launch activities. During Delta IV Heavy and SLS launch campaigns, additional tankers (in addition to the two tankers normally retained at KSC) may be retained at KSC.
 - (2) Two liquid helium storage vessels, each with a capacity of 30,000 gallons (approximately 113,000 liters) are anticipated to be available for use in support of Space Launch System (SLS) launch requirements. The storage vessels are not currently in use and will require additional LHe (estimated as partial tanker load per dewar) for initial cooldown as part of initial fill. Chilledown and filling of these storage vessels will require coordination with the user location to ensure adequate GHe storage is available to capture anticipated flash off of LHe. Deliveries to fill these storage vessels may be divided up over a 30 day period prior to launch. Note that these storage vessels will only support the requirements of one SLS launch attempt (see

- “Other Special Considerations” for SLS launch requirements). Additional LHe tankers will be required to support the second launch attempt (48 hours after the first attempt).
- (3) For Bulk Liquid, the contractor shall deliver within 72 hours of receiving a request for shipment. Dewars will be provided with 4 days notice.
- (h) Government-Furnished Equipment: Two bulk liquid tankers and two 100 liter dewars are available for use at this delivery location.
- (1) The Contractor shall maintain the Government-Furnished tankers as part of the Contractor’s fleet. Contractor paint, designs and logos may be applied to the tankers. The Contractor shall repair and maintain the tankers in compliance with DOT regulations, and applicable safety standards. Repair work and workmanship must be in accordance with applicable DOT and American Society of Mechanical Engineers (ASME) codes. The Contractor shall also be responsible for any tanker modification work required due to changes in applicable DOT regulations for the transportation of helium. An on-going maintenance program for the tankers shall be in accordance with Contractor fleet standards. The tankers are to be used by the Contractor only in the Continental United States (CONUS), unless specifically approved in writing by the Contracting Officer.
- (2) The Contractor shall provide the Government a copy of any design documentation utilized to modify or perform major repairs on the tankers. The Contractor shall document all changes that affect material compatibility or configuration of the tanker fluid system. Configuration changes must be coordinated and approved by the Contracting Officer prior to tanker modifications. The Contractor is not responsible for major modifications or repairs that exceed \$10,000 per tanker per year, unless repairs are attributable to damage caused by a mishap while under the Contractor’s control. Tanker disposal, in the event a tanker is no longer usable, will be performed by the Government.
- (3) The Contractor shall inspect the tankers prior to transfer and notify the Government of any discrepancies. Prior to transfer the Government will take appropriate action to correct all discrepancies at no cost to the Contractor. At a schedule mutually acceptable to both the Contractor and the Government, this inspection will take place at a mutually agreed upon location. The initiation of the inspection process and discrepancy correction will be made in a timely manner prior to the first scheduled helium delivery.
- (4) Tanker Maintenance/Repair Responsibilities: Contractor shall be responsible for normal maintenance. Normal maintenance is defined as those activities required to keep the tanker operational and road worthy in accordance with the Contractor’s standard tanker maintenance program and in compliance with DOT regulations governing the transportation of liquid helium. Examples of normal maintenance include: (i) Repair and maintenance of automotive system such as tires, brakes, lighting, and running gear; (ii) Corrosion control of the carbon steel surfaces to prevent degradation of structural members and outer shell; (iii) Maintenance, repair, and like item replacement of fluid system to include piping and components; (iv) Calibration of gauges and relief devices in accordance with DOT requirements; (v) Maintenance of fluid system and inner tank cleanliness integrity; (vi) Maintenance of vacuum integrity, such as periodic pumping; (vii) Tanker modification required to facilitate fill operations at Contractor’s location(s); (viii) Minor welding repair to structural members; (ix) Modifications to the fleet of Government-furnished tankers for upgrades to comply with DOT regulations for which the total cost is less than \$10,000 per each individual directive for all Government-furnished tankers combined; (x) Inspection and marking of tanker to meet DOT regulations.

- (5) Periodic Tanker Refurbishment: Contractor shall be responsible for periodic refurbishment. Periodic refurbishment is defined as a program that occurs approximately every ten years where the overall condition of the tanker is assessed and reviewed for DOT compliance. Periodic refurbishment will normally include such things as: (i) Sandblasting and repainting of the tanker; (ii) Disassembly, inspection, and maintenance of running gear; (iii) Fluid system inspection and cleaning, as required.
- (6) Tanker Mishap: Contractor shall be responsible for any repair/restoration due to damage from vehicle mishap while under Contractor control.
- (7) Major Modification: The Government will be responsible for major modification and repair required to maintain the life of the tanker. Major modification work will include such items as: (i) Work to repair, replace, or restore insulation or “getter” material; (ii) Vacuum repairs to the tanker requiring cutting and welding on inner and/or outer vessel; (iii) Major repairs required to maintain acceptable one-way travel time; (iv) Modifications to the tanker required for delivery of product at Government locations; (v) Replacement of major structural material; (vi) Replacement of major automotive items such as bogie assembly; (vii) Major repair to correct damage as a result of acts of God or when tanker is under control of the Government.
- (8) Other Special Considerations:
 - (i) Tanker Demurrage (i.e., detention of tankers): Since the Government is providing 2 liquid tankers for the Contractor to use in performance of this contract, no demurrage charges will be assessed for up to 2 tankers detained at KSC.
 - (ii) Liquid dewars: The Government will provide two 100 dewars to the contractor to fill dewar requirements identified in the Schedule. These dewars may be retained at the contractors facility until delivery required. In the absence of available Government dewars, contractor owned dewars will be provided. Because the Government is providing two 100 liter dewars for use in performance of this contract, no demurrage charges will be assessed for up to two 100 liter dewars detained at KSC.
 - (iii) One-way charges: In the event the Contractor is directed to drop or pick up a tanker at KSC and is unable to haul another tanker for ½ the route (also known as a dead-head or bob-tail run) the Government will incur a one-way charge. In the event the Contractor is directed to drop off or pick up a dewar at KSC and is unable to haul another dewar for ½ the route (also known as a dead-head or bob-tail run) the Government will incur a one-way charge.
 - (iv) Launch profiles:
 - (A) Delta IV Heavy launches currently requires helium support for four launch attempts in 6 days. Two attempts (with 24 hrs between launch attempts #1 and 2), followed by a 48 hour break then two more launch attempts (with 24 hrs between attempts #3 and 4). 80,000 liters of bulk LHe required for each launch attempt.
 - (B) Space Launch System (SLS) launch currently requires helium support for two launch attempts with 48 hours between attempts. 165,000 liters of bulk LHe estimated required for each launch attempt. See “Special Delivery Conditions” for information of on-site LHe storage availability.
 - (C) Continuation of current launch rates for Atlas V (est 6 per year) , Delta IV-Medium (est 2 per year on Delta IV Heavy launch years, 3 per year otherwise) and Falcon 9 (est 6-8 per year) is anticipated. Delta IV-Medium launches require half the Delta

IV-Heavy requirement per launch attempt/scrub. Based on three launch attempts/scrubs per launch campaign, best estimates for Atlas V and Falcon 9 launch campaigns are ~ 40,000 liters per launch campaign.

- (D) Wet Dress Rehearsals (using equivalent of one launch attempt) for SLS, Delta IV-Heavy and Delta IV-Medium anticipated approximately one month prior to launch
- (i) Geographic Location: KSC is located approximately 40 miles east of Orlando, Florida, and 2 miles south of Titusville, Florida.
- (j) Delivery Driver Directions: Deliveries shall be made direct to NASA, Kennedy Space Center, Florida, Building K7-468, KSC Propellants North CCF Area. The driver will obtain a visitor badge at the Visitor Pass and ID station located just west of Gate 3 on State Road 405. After obtaining a badge proceed to Gate 3 for security check. After Gate 3 drive approximately 1/4 miles east to exit ramp marked "TO VAB" (just prior to the SR 3 overpass). The driver will exit, turn left and travel north approximately 4 miles to Saturn Causeway. Turn right on Saturn Causeway and proceed past the VAB and around the curve. Approximately 3/4 mile past the curve, the driver will turn left (north) on to Fluid Servicing Rd, which crosses the gravel crawler-way. Check in with the CCF operations Lead Technician in Building K7-468, the first building on the right after crossing the gravel Crawler-way.

(End of text)

LANGLEY RESEARCH CENTER (LaRC)

- (a) Delivery Address
 - Langley Research Center
 - Building 1206
 - Hampton, VA 23681
- (b) Delivery Hours
 - (1) Routine delivery hours: 7:30 a.m.- 2:00 p.m. (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week
- (c) Routine Requirements:
 - (1) LHe: 160 liters per month in 60 and 100 liter dewars. Routine requirement anticipated five times a year.
 - (2) GHe: 440 scf per month
- (d) Peak Requirements:
 - (1) LHe: 300 liters per month, anticipated 1 time per year.
 - (2) GHe: 660 scf per month, anticipated 2 times per year.
- (e) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.
- (f) Government-Furnished Equipment: 75 Government-owned cylinders are available.
- (g) Special Delivery Conditions: Contractor to provide all dewars. Dewar delivery within 72 hours of ordering. Cylinder delivery within 15 days of pickup.
- (h) Geographic Location: Hampton, Virginia, Hampton Roads region of southeast Virginia
- (i) Delivery Driver Directions:
 - (1) From Richmond/Williamsburg/Newport News Area: Take I-64 east to Exit 261B, Hampton Roads Center Parkway, NASA Exit; Proceed to the end of the Parkway (approximately 1.8 miles), moving into the left lane; Turn left onto Armistead Avenue towards NASA/Langley Air Force Base; Go past the Langley Air Force Base West Gate, moving into the right lane (approximately 1.2 miles); Exit off Armistead Avenue to Commander Shepard Blvd and the NASA Main Gate.
 - (2) From Norfolk Area: Take I-64 west through the Hampton Roads Bridge Tunnel; Remain on I-64 west to Exit 262B, Magruder Blvd; Remain on Magruder Blvd. through three (3) traffic lights, moving into the right lane; Exit off Magruder Blvd onto Commander Shepard Blvd (Route 172 North, marked "NASA") (approximately 1 mile from last traffic light, and before the overpass); Remain on Commander Shepard Blvd through the traffic light (approximately 1.2 miles), and you will be at the NASA Main Gate.
 - (3) From Isle of Wight Area: Take Route 17 North over the James River Bridge (Route 17 becomes Mercury Blvd at this point); Continue on Mercury Blvd to the I-64 intersection (approximately 4 miles); Get on I-64, heading West; stay in the right lane on I-64 West to Exit 262B, Margruder Blvd; Remain on Magruder Blvd onto Commander Shepard Blvd. (Route 172 North, marked "NASA") (approximately 1 mile from last traffic light, and before the overpass);

Remain on Commander Shepard Blvd. through the traffic light (approximately 1.2 miles), and you will be at the NASA Main Gate.

- (4) From Hampton: get on I-64 west to Exit 262B, Magruder Blvd, to NASA; Proceed north on Magruder Blvd (approximately 1.5 miles); Exit Magruder Blvd at ramp to NASA/Langley Air Force Base, Route 172 north; Continue on Route 172 north to NASA Main Gate (approximately 1.2 miles).

(End of text)

MARSHALL SPACE FLIGHT CENTER (MSFC)**(a) Delivery Address**

Marshall Space Flight Center

Marshall Space Flight Center, AL 35812

(b) Delivery Hours**(1) Routine delivery hours:**

(i) Bulk Gas deliveries: 7:00 a.m.- 2:00 p.m. Monday through Friday

(ii) Dewar deliveries: 8:00 a.m. - 4:00 p.m. (local time) Monday through Friday.

(2) Emergency delivery hours: 24 hours per day, 7 days per week.**(c) Routine Requirements:**

(1) Dewar liquid : 250 liters per month

(2) Bulk gas: 600,000 scf per month. Weekly deliveries of 150,000 scf anticipated.

(d) Peak Requirements:

(1) Dewar liquid: 1,000 liters per month, anticipated twice per year

(2) Bulk gas: 1,800,000 scf per month, anticipated once per year. Highest projected weekly order is estimated to be 900,000 scf, occurring approximately 2 times per year. These peak requirements anticipated to be coinciding with testing of Space Launch System (SLS) hardware and will be coordinated in advance by the location

(e) Special Delivery Equipment Requirements:

(1) Contractor must supply all dewars. Normal dewar size will be 250 liters, but occasionally 100 liter and 500 liter dewars will be used. 100 liter and 250 liter size dewars must be nonmagnetic dewars, 500 liter size dewars occasionally may require nonmagnetic dewars

(2) Bulk gas deliveries require trailer connection adaptable to ½ inch AN (AN-8) fitting. For Bulk Gas, the Contractor trailers shall be parked at one of 2 unloading stations at Building 4676. They will be connected through GFE flex hoses to a GFE helium compression system which will boost the helium pressure and fill into GFE helium storage vessels. The receiver vessel volume is 330,000 scf at the maximum allowable pressure of 4,000 psig. Typical receiver vessel pressure at the time of delivery is 1,000 psig. Typical unload time is 8 hours.

(f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. The contractor is required to obtain badges for delivery personnel for access to the Center. The contractor shall ensure that these badges remain current.

(g) Special Delivery Conditions:

(1) Liquid dewars: Contractor must supply all dewars.

(2) Bulk gas deliveries: The Government may, at its option, retain the delivered vendor tube trailer for up to 30 days.

(3) Normal delivery within 48 hours of receiving a request for shipment.

(h) Geographic Location: Redstone Arsenal, Huntsville, Alabama

(i) Delivery Driver Directions: Approaching Huntsville from west I-565, exit at South Memorial Parkway and head south. Take the Martin Road exit (west) that leads into MSFC, through Gate 1. All deliveries must come through this gate for inspection.

(1) Liquid Dewar Delivery: Liquid dewar delivery shall be made to Central Receiving in Building 4631 for processing and distribution to Building 4481. Central Receiving: From Gate 1, proceed west on Martin Road and turn left on Dodd Road (south). Turn right

(west) on Fowler Road. Turn left on Saturn. Central Receiving is located in Building 4631 on the right.

- (2) For Bulk Gaseous Helium Deliveries: From Gate 1 proceed west on Martin Road. Turn left at Dodd road. Building 4659 is on the right side of Dodd Road 6 or seven buildings down. It is recessed from the road. The driver shall check in at the truck scale weigh house located by a semi-trailer parking lot in front of the building. During normal delivery hours, the driver should use the truck horn if the weigh scale house is unoccupied. If a delivery is to be made outside of normal hours, special arrangements must be made. The telephone number at the receiving facility is (256) 544-9456.

(End of text)

MICHOUD ASSEMBLY FACILITY (MAF)

- (a) Delivery Address
 - Michoud Assembly Facility
 - 13800 Old Gentilly Road
 - New Orleans, LA 70129
- (b) Delivery Hours
 - (1) Routine delivery hours: 8:00 a.m.- 3:00 p.m.(local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week
 - (3) NOTE: MAF helium requirements must be met 365 days per year, without interruption.
- (c) Routine Requirements
 - (1) Liquid dewars: 500 liters per month.
 - (2) Bulk Gas: 100,000 scf per month.
- (d) Peak Requirements
 - (1) Liquid dewars: 1000 liters per month
 - (2) Bulk Gas:
 - (i) 1,000,000 scf per month anticipated once per year in Contract Year 2 (FY16) and Contract Year 5 (FY19). Highest weekly order anticipated of 360,000 scf .
 - (ii) 200,000 scf per month anticipated once per year in Contract years 1, 3 and 4 (FY 15, FY17 and FY18)
- (e) Special Delivery Equipment Requirements
 - (1) Liquid dewars: 500 liter dewars only
 - (2) Bulk gas: User will normally order trailers for “drop and swap” deliveries to MAF. Cascade offload into facility storage will also be an available delivery method if requested by the user at the time of order. If cascade option is used, the minimum offload pressure is 2400 psig with facility storage of 145,000 scf capacity at 2400 psig. (storage consists of 475.2 cubic feet water volume per trailer, 2 trailers, MAWP 2,640 psig). Typical delivery unload time for cascade option is 2 hours per receiving storage trailer.
- (f) Special Access Requirements (i.e., security): All drivers required to be US citizens. Drivers are screened at gate entry by review of the following info:
 - (1) Identification (Commercial Drivers License and employee ID)
 - (2) Manifest with on-site destination indicated.
- (g) Government-Furnished Equipment: Approximately thirty-six 500 liter dewars are available.
- (h) Special Delivery Conditions:
 - (1) Occasional requirement for 24 hour delivery. The “short notice emergency delivery charge” will apply for these 24 hour deliveries. Normal requirement is 72 hour delivery.
 - (2) Peak Requirements for Contract Years 2016 and 2019 are for support of Space Launch System (SLS) hardware testing currently anticipated in these Contract Years

- (i) POCs and Ship To Address:
 - (1) Liquid Dewers:
 - (i) Lynette St Ann (Primary): Phone: 504-257-3165. Michoud Assembly Facility, 13800 Old Gentilly Road, New Orleans, LA, 70129
 - (ii) Keith Ponchot (Backup): Phone: 504-257-0799
 - (2) Gaseous Bulk:
 - (i) John Vitrano (Primary): Phone: 504-257-1068. Michoud Assembly Facility, 13800 Old Gentilly Road, New Orleans, LA, 70129;
 - (ii) Pete Shurko (Backup): Phone: 504-257-2411.
- (j) Geographic Location: The 832 acre NASA MAF is located in New Orleans, Louisiana some 24 miles from New Orleans International Airport and 15 miles from the French Quarter.
- (k) Delivery Driver Directions:
 - (1) From the New Orleans International Airport: Look for the I-10 East signs as you leave the airport. Take Airport Access Road to I-10 East. Go eastbound on I-10 for about 7 miles. At that point, the interstate splits into I-10 and I-610. Take the on I-610 fork. Travel 7 miles until you reach the I-10/I-510 interchange (Exit 246A). Refer to the last section for directions to MAF from the I-510.
 - (2) From Slidell, Louisiana or points east: Proceed west on I-10. After Slidell, Louisiana, I-10 crosses Lake Ponchartrain. Proceed approximately 14 miles after you cross the lake to the I-10/I-510 interchange (Exit 246A). Refer to the next section for directions to MAF from the I-510.
 - (3) To reach MAF via the I-510: Turn on to I-510 from I-10 (south, headed toward Chalmette). Proceed south on I-510 to Exit 2C (third exit). Take Exit 2C, then first left. At stop sign, turn left again, crossing over I-510. Go east 0.7 miles on Old Gentilly Road. MAF will be on your right. Go straight through traffic light at intersection of Michoud Blvd and Old Gentilly Road. Proceed as directed below.
 - (i) Liquid Helium Dewar Deliveries: Take Old Gentilly Road to Gate 12 (Gate for Contractors), Proceed to loading docks on the South side of Building 103. Guard at gate can provide directions.
 - (ii) Bulk Gaseous Helium Deliveries: Take Old Gentilly Road to Gate 12 (Gate for Contractors), Proceed to Building 103 W. Concrete Apron on the west side of Vertical Assembly Building (VAB). Guard at gate can provide directions.

(End of text)

STENNIS SPACE CENTER (SSC)

- (a) Delivery Address
 - John C. Stennis Space Center
 - Building 3305
 - Stennis Space Center, MS 39529
 - (b) Delivery Hours
 - (1) Routine delivery hours: 7:00 a.m.- 10:00 p.m. (local time), Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week.
 - (c) Routine Requirements: 1,260,000 scf per month.
 - (d) Peak Requirements: 2,160,000 scf per month.
 - (1) Highest projected daily order is estimated to be 360,000 scf.
 - (2) The highest projected weekly order is estimated to be 1,080,000 scf, occurring approximately 6 times per year.
 - (3) Peak requirements anticipated to occur during Space Launch System (SLS) stage testing, currently scheduled to start early in Contract Year 3 for a period of approximately five months.
 - (e) Special Delivery Conditions: Normal delivery within 48 hours of receiving a request for shipment.
 - (f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. Entry into SSC is restricted to badged personnel only. The contractor is required to obtain badges for delivery personnel for access to the Center. The drivers who deliver to SSC on a regular basis (at least 3 times per week) complete a NCHC background check. They are badged for up to one-year at a time or the length of contract. Part time or fill-in drivers are badged as needed for access to SSC. If the request is going to exceed 29 days then a NCHC is submitted. However, Security advises the individual companies to complete some type of background check involving FBI fingerprint checks. The contractor shall ensure that these badges remain current.
 - (g) Geographic Location: The John C. Stennis Space Center (SSC) is located in Hancock County, Mississippi, and is located approximately 50 miles east of New Orleans, Louisiana.
 - (h) Delivery Driver Directions: Helium deliveries shall be made directly to NASA, Stennis Space Center, Mississippi, Building 3305, High Pressure Gas Facility. The driver will enter the South Gate, just north of Interstate 10 (Exit 2). The driver will proceed through the gate on Trent Lott Parkway, approximately 2.1 miles; to the third traffic light, intersection of Trent Lott Parkway and Saturn Drive. The driver will then turn right (east) onto Saturn Drive and go approximately 1.4 miles to Building 3305. Turn right and go through the entrance to Building 3305, High Pressure Gas Facility.
- (End of text)

WHITE SANDS TEST FACILITY (WSTF)

- (a) Delivery Address
JSC White Sands Test Facility
12600 NASA Road
Las Cruces, NM 88012
- (b) Delivery Hours
 - (1) Routine delivery hours: 7:30 a.m. - 2:00 p.m. (local time) Monday through Friday
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week.
- (c) Routine Requirements: 130,000 scf per week to occur 2 times per year
- (d) Peak Requirements: 260,000 scf per week to occur once a year
- (e) Special Delivery Equipment Requirements: Connections adaptable to Standard "AN" fittings. Bulk gas minimum offload pressure: 600 psig. Bulk gas deliveries will normally involve cascade into location's gaseous helium storage (max operating pressure of 2400 psi). Estimated off-load time (including potential sampling) is approximately 5 hours when 3000 psi trailers are used. Approximately once a year, test requirements will require the bulk gas trailer to remain at the location for up to 5 weeks.
- (f) Special Access Requirements (i.e., security): Drivers are required to be U.S Citizens or lawful permanent resident, to be verified by the WSTF Security Office. A list of drivers should be sent to WSTF to decrease waiting time for drivers and to provide prior validation for drivers. Drivers will be escorted upon arrival at the location. Escorted drivers will require individual badging. Drivers should be prepared to show driver's license and vehicle registration and for vehicle searches.
- (g) Government-Furnished Equipment: N/A.
- (h) Special Delivery Conditions:
 - (1) WSTF is closed on alternate Fridays ("Flex Fridays"). Receipt of deliveries not available on these alternate Fridays. If delivery is required on a Friday, location will ensure order placed to ensure delivery date is not a "Flex Friday"
 - (2) Deliveries within 48 hours of ordering.
- (i) Ship To Address:
Mary Burke
Mail Code: RH
NASA JSC, White Sands Test Facility, 12600 NASA Road
Las Cruces, NM 88012
Phone: 575-524-5449 ; Cell: 575-635-1363
(Alternate: John Bernal; Mail Code: RH; Phone: 575-524-5140; Cell: 575-649-5284)
- (j) Geographic Location: WSTF is remotely located on the west slope of the San Andres mountains between Las Cruces, New Mexico, and the White Sands Missile Range, about 20 miles Northeast of Las Cruces, New Mexico.
- (k) Delivery Driver Directions: From Las Cruces, NM, go east on highway 70, 10.5 miles from the I-25 exit 6. Turn north at the NASA/Baylor Canyon exit and go 6 miles. Stop at the guard gate. You will be directed to the weigh scales, and escorted from that point.

(End of text)

**ARMSTRONG FLIGHT RESEARCH CENTER (AFRC), PALMDALE CA
(LA-PALMDALE REGIONAL AIRPORT OPERATIONS)**

- (a) Delivery Address
LA-Palmdale Regional Airport
2825 East Avenue P, Bldg 703
Palmdale, CA 93550
- (b) Delivery Hours
 - (1) Routine delivery hours: 8:00 a.m.- 3:00 p.m.(local time) Monday through Friday.
 - (2) Emergency delivery hours: 24 hours per day, 7 days per week
- (c) Routine Requirements: 2800 liters of dewar liquid per month. Weekly delivery amounts of 700 liters anticipated. Routine Requirements increase to 3800 liters per month and 1700 liters per week up to six times a year during months/weeks with deliveries of four 250 liter dewars (See Special Delivery Conditions")
- (d) Peak Requirements: 4600 liters of Dewar liquid per month, anticipated 2 times per year. Maximum anticipated weekly delivery amount of 2000 liters.
- (e) Special Delivery Equipment Requirements: Contractor must supply all dewars. 100 liter dewars will be required for the majority of requirements with periodic 250 liter dewars required for specific servicing requirements (see "Special Delivery Conditions"). A lift-gate on the rear of the delivery truck is necessary for on/off-loading Dewars.
- (f) Special Access Requirements (i.e., security): All drivers required to be U.S. citizens. Driver should enter the parking lot immediately in front of Building 703 and report to the Security bungalow in front. The guard will issue a temporary visitor badge and call the delivery POC inside for escort.
- (g) Government-Furnished Equipment: None
- (h) Special Delivery Conditions
 - (1) LHe deliveries in support of Stratospheric Observatory for Infrared Astronomy (SOFIA) operations. Flight operations anticipated 9 to 10 months a year with maintenance periods 2 to 3 times each year (each maintenance period lasting approximately one month). There is the potential to change to one 2-month maintenance period verses multiple 1- month maintenance periods during a year. Majority of LHe dewar requirements will occur during months of flight operations (see "Routine" and "Peak" requirements for quantities) with reduced usage during maintenance periods (currently anticipated at approximately 100 liters per week). First flight operations anticipated to begin in November 2014.
 - (2) Deliveries anticipated 1-2 times a week, with deliveries two times a week anticipated routinely during flight operation months. Reduced delivery quantity anticipated during maintenance periods. Deliveries on Tues/Thurs or Tues/Fri desired for twice weekly deliveries.
 - (3) Deliveries of 1000 liters (in a single delivery) in 250 liter dewars anticipated four to six times a year to support specific instrument servicing during flight operations. Remaining requirements will require 100 liter dewars. If less than 1000 liters in 250 liter dewars is required in a single delivery, 250 liter and 100 liter dewars may be ordered together and for receipt in the same shipment/delivery. If more than 1000 liters total is required in a week, there would be a minimum of two deliveries (on different days) during that week.

- (4) Potential requirement for deliveries on Monday in addition to regular twice-weekly deliveries during high usage periods.
 - (5) Normal deliveries within 48 hours of receiving a request for shipment. Potential for emergency delivery with 24-hour notice if operations require. The “short notice emergency delivery charge” will apply for these 24 hour deliveries.
 - (6) Driver should enter the parking lot immediately in front of Building 703 and report to the Security bungalow in front. The guard will issue a temporary visitor badge and call the delivery POC inside. The delivery POC will come outside, open the vehicle gate, and direct the driver to the two cryogen storage sheds inside the fenced area for off-loading. A lift-gate on the rear of the delivery truck is necessary for on/off-loading Dewars.
- (i) Geographic Location: Located at the LA Palmdale Regional Airport in Palmdale CA
 - (j) Delivery Driver Directions: From Highway CA-14 North (Antelope Valley Freeway) in Palmdale, CA, take exit #37 (Rancho Vista Boulevard) and travel east on Rancho Vista Boulevard (also called Avenue P for portions of the same road) approximately 3.5 miles to 30th Street East. Turn left at stop sign and follow the road into the complex. Signs will direct drivers to NASA delivery location (Note: driver is NOT to follow the signs for fuel deliveries). The NASA hangar (Building 703) is the larger of the two hangars and is marked with the NASA logo. Driver should enter the parking lot immediately in front of Building 703 and report to the Security bungalow in front. The guard will issue a temporary visitor badge and call the delivery POC inside. The POC will come outside and open the vehicle gate, and direct the driver to the two cryogen storage sheds inside the fenced area for off-loading.

(End of text)

DELIVERY LOCATION CONTACTS

LOCATION	TYPE	NAME	TELEPHONE	EMAIL	FUNCTION
ARC	All				Contracting
AFRC	All				Contracting
CSBF	All				Contracting
GRC-LF	All				Contracting
GRC-PS	All				Contracting
GSFC	All				Contracting
WFF	All				Contracting
JSC	All				Contracting
JPL	All				Contracting
KSC	All				Contracting
LaRC	All				Contracting
MSFC	All				Contracting
MAF	All				Contracting
SSC	All				Contracting
WSTF	All				Contracting
ARC	All				Requirements
AFRC	All				Requirements
CSBF	All				Requirements
GRC-LF	All				Requirements
GRC-PS	All				Requirements
GSFC	All				Requirements
WFF	All				Requirements
JSC	All				Requirements
JPL	All				Requirements
KSC	All				Requirements
LaRC	All				Requirements

MSFC	All				Requirements
MAF	All				Requirements
SSC	All				Requirements
WSTF	All				Requirements

PIV CARD ISSUANCE PROCEDURES

FOR

NASA-WIDE CONTRACT FOR HELIUM

PIV CARD ISSUANCE PROCEDURES IN ACCORDANCE WITH FAR CLAUSE 52.204-9, PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

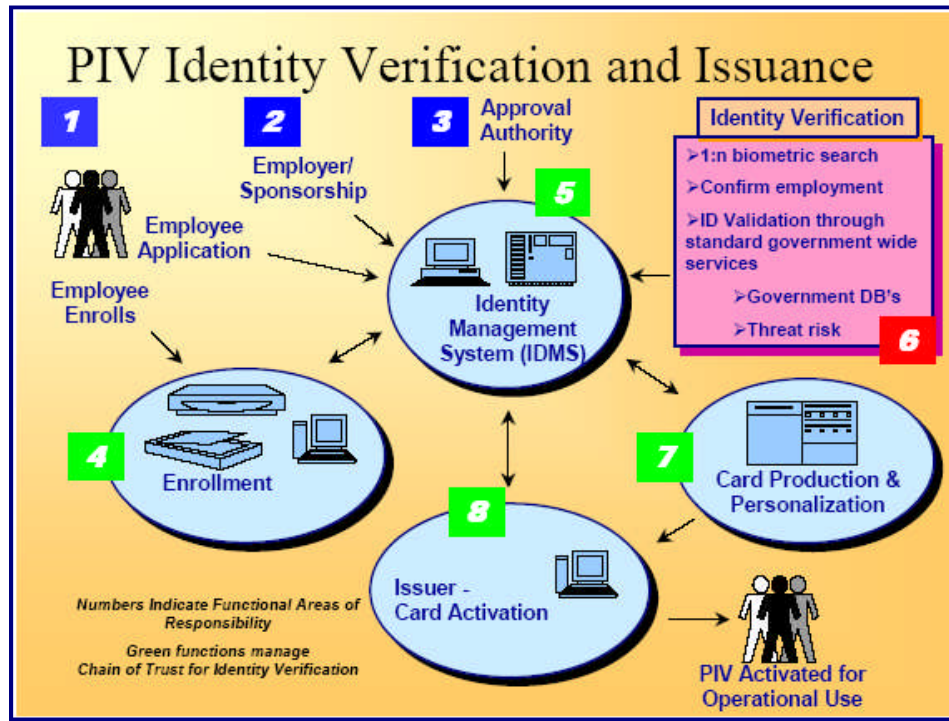


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

STEP 1: The Contractor's Corporate Security Officer (CSO), Program Manager (PM), or Facility Security Officer (FSO) submits a formal letter that provides a list of contract employees (applicant) names requesting access to the NASA Contracting Officer's Technical Representative (COTR). In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFMMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a contract where a COTR has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the COTR mentioned herein. In each case, the letter shall provide notification of the contract or foreign national employee's (hereafter the "applicant") full name (first, middle and last), social security number (SSN) or NASA Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the contract employee has a current satisfactorily completed National Agency Check with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that contract employees may be denied access to NASA information or information systems based on an unsatisfactory background investigation/adjudication.

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the COTR/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the COTR/host information and instructions on how to access the e-QIP for each contract or foreign national employee requiring access

STEP 2: Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one which must be a Federal¹ or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear no later than the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

STEP 3: Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

STEP 4: Prior to authorizing physical access of a contractor employee to a federally-controlled facility or access to a Federal information system, the CCS will ensure that a check has been performed with the National Crime Information Center (NCIC) and Interstate Identification Index. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the COTR/host of the determination regarding access made by the CCS.

STEP 5: Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the COTR will advise the contractor that the employee is being denied physical access to all federally-controlled facilities and Federal information systems.

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the COTR/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

¹ A non-PIV government identification badge, including the NASA Photo Identification Badge, MAY NOT BE USED for the original issuance of a PIV vetted credential

STEP 6: Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

STEP 7: The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential.

The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9) documents. These documents **must** be the same documents submitted for registration.

The credential issuing operator will verify that the facial image, and optionally reference finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, et al.) may be modified to more accurately record the employee's information.

The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance.

ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED AND ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.
2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination if an additional extension will be granted for the temporary identification card.
3. Upon return of the completed NAC, the process will continue from Step 5.

DELIVERY ANALYSIS TABLE

FOR

NASA-WIDE CONTRACT FOR HELIUM

Table identifies the estimated yearly delivery trips by location for each CLIN applicable to transportation mode/container type.

Type	Contract Year	Estimated Yearly Delivery Trips by Location for each CLIN Applicable to Mode/Container																
		ARC, Moffett Field, CA	AFRC, Palmdale, CA	CSBF, Port Hueneme CA	CSBF, Palestine, TX	CSBF, Fort Sumner, NM	GRC, Cleveland, OH	GRC, Sandusky, OH	GSFC, Greenbelt, MD	WWF, Wallops Island, VA	JPL, Pasadena, CA	JSC, Houston, TX	KSC, KSC, FL	LaRC, Hampton, VA	MSFC, MSFC, AL	MAF, New Orleans, LA	SSC, SSC, MS	WSTF, Las Cruces, NM
Tanker	Year 1												47					
Tanker	Year 2												51					
Tanker	Year 3												53					
Tanker	Year 4												35					
Tanker	Year 5												46					
Trailer	Year 1			6	10	28	5	11			0	3			40	2	57	4
Trailer	Year 2			8	10	28	3	8			0	3			47	7	58	4
Trailer	Year 3			8	10	28	3	8			0	3			47	2	60	4
Trailer	Year 4			8	10	28	3	8			1*	3			47	2	33	4
Trailer	Year 5			8	10	28	3	8			0	3			47	7	63	4
Dewar	Year 1	12	95	5	7	8			48		48	20	11	10	13	3		
Dewar	Year 2	12	95	5	7	8			48		48	20	11	10	13	4		
Dewar	Year 3	12	95	5	7	8			48		48	20	11	10	13	5		
Dewar	Year 4	12	95	5	7	8			48		48	20	11	10	13	5		
Dewar	Year 5	12	95	5	7	8			48		48	20	11	10	13	6		
Cylinder	Year 1	14							13	8		13		16				
Cylinder	Year 2	14							13	8		13		16				
Cylinder	Year 3	11							13	8		13		16				
Cylinder	Year 4	11							13	8		13		16				
Cylinder	Year 5	11							13	8		13		16				

*Location uncertain of actual year of single trailer delivery expected during the Period of Performance of the contract. Actual delivery may occur during any year of the Period of Performance of the contract.